DE GRUYTER

Rüdiger Arnzen (Ed.)

AVERROES ON ARISTOTLE'S ›METAPHYSICS‹

AN ANNOTATED TRANSLATION OF THE SO-CALLED ›EPITOME‹

Averroes
On Aristotle's "Metaphysics"

Scientia Graeco-Arabica

herausgegeben von
Marwan Rashed

Volume 5

De Gruyter

Averroes

On Aristotle's "Metaphysics"

An Annotated Translation of the So-called "Epitome"

edited by

Rüdiger Arnzen

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Union Académique Internationale
Corpus Philosophorum Medii Aevi
Academiarum Consociatarum auspiciis et consilio editum

Averrois Opera
Editioni curandae praeest
Gerhard Endress

Series A
Averroes Arabicus

XXXV

Epitome
in Aristotelis Metaphysicorum libros

In linguam anglicam vertit
prolegomenis commentariis indicibusque instruxit
Rüdiger Arnzen

The research for this publication was sponsored by the

Alfried Krupp von Bohlen
und Halbach-Stiftung

ISBN 978-3-11-022001-8
e-ISBN 978-3-11-022002-5
ISSN 1868-7172

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

© 2010 Walter de Gruyter GmbH & Co. KG, Berlin/New York

Printing and binding: Hubert & Co. GmbH & Co. KG, Göttingen
∞ Printed on acid-free paper

Printed in Germany

www.degruyter.com

PREFACE

The Arab philosopher Abū l-Walīd Muḥammad Ibn Rushd (1126–98), among western historians of philosophy better known by his Latinized name Averroes, composed more than thirty commentaries and studies on the works of Aristotle. Although these commentaries had an enormous influence on medieval Latin and Hebrew philosophy in general as well as on the reception and transformation of Aristotelian doctrines in particular, a lot of them are still in need of reliable critical editions, and an even greater number still await complete modern translations in order to be readily accessible to students and scholars of medieval philosophy unable to read the original Arabic texts.

This applies also to the work presented here for the first time in a complete English translation for which there is no definitive critical edition of the Arabic text available. As a matter of fact, the translation was originally supposed to be accompanied by a critical edition of the Arabic text itself—a plan that had to be postponed for the time being because it was impossible to obtain copies of all extant medieval and early modern manuscripts of the work. However, the translation is based not only on the previous editions of the text, but also on a number of thoroughly collated Arabic manuscripts not taken into consideration in these editions. Thus, the present translation is not only of interest to those engaged in medieval philosophy yet unable to examine the Arabic documents, but it might also be helpful for exploring the Arabic manuscripts and assaying Averroes' intentions more comprehensively and accurately than this has been possible on the basis of the previous Arabic editions.

The research toward the present translation and commentary has been supported and facilitated by numerous institutions and individuals. Averroes' approach to Aristotle's *Metaphysics* and in particular his work presented here have been part of a more comprehensive project focusing on medieval Arabic metaphysics. During the years 2005–08, the *Alfried Krupp von Bohlen und Halbach-Stiftung* financed a full-time research position of the present editor for this project. The final

revision of the translation and the annotations and their appropriate digitization have been supported by funds granted by the *Gesellschaft der Freunde und Förderer der Nordrhein-Westfälischen Akademie der Wissenschaften*. Furthermore, the *Nordrhein-Westfälische Akademie der Wissenschaften und der Künste* kindly subsidized the printing of the present volume. It is my great pleasure to express my gratitude to these institutions, without whose support I would never have been able to undertake this project.

Equally important was the help I have received from a number of friends and colleagues. First and foremost I wish to thank Peter Adamson for his minute corrections of my English and for his incisive criticisms of the translation and my annotations. Many of his suggestions led me to further reflection on problems concerning the interpretation of the Arabic text or called my attention to publications or philosophical questions and contexts I had not been aware of before.

The second pillar of the project was Horst Schmieja who wrote a specially adapted version of the TUSTEP programme for the preparation of a camera-ready copy of the present volume and provided technical assistance and advice at each stage of the project. I am deeply indebted to him for this friendly help.

Gerhard Endress kindly shared his profound knowledge about the transmission and interdependence of the Arabic manuscripts containing Ibn Rushd's works during the initial stage of the project. Cecilia Martini Bonadeo and Gerhard Endress lent me their photographs of some Arabic manuscripts. Firouzeh Saatchian and Jan-Peter Hartung helped in obtaining copies of two Iranian and Indian manuscripts. Mauro Zonta offered invaluable help and advice regarding the Hebrew transmission of the text. I am grateful to each of these persons for their willingness to give a helping hand. Thanks are also due to the personnel of the Thomas Institute of the University of Cologne, especially to Andreas Speer, its director, and to Wolfram Klatt, its librarian, who readily provided all necessary research facilities and supported the project in many ways.

My gratitude also extends to the general editor of the *Averrois Opera* series, Gerhard Endress, for his willingness to include the present volume in this series. Since the initial "plan for the publication of a *Corpus Commentariorum Averrois in Aristotelem*", drafted in 1931 by Harry Austryn Wolfson, a number of editions and translations of Ibn Rushd's

works have been published by various publishers in this series, which is currently being carried on under the aegis of the Union Académique Internationale.

Finally, I wish to thank Marwan Rashed, the editor of the excellent newly-introduced series *Scientia Graeco-Arabica*, for having invited me to publish the present work in this series.

Autumn 2009 R. A.

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TRANSLATOR'S INTRODUCTION

1. Title, nature, and structure of the treatise

The treatise presented here is commonly referred to as Ibn Rushd's "Epitome of Aristotle's *Metaphysics*". Adopting this denomination for the sake of convenience, we must be aware of the following two facts. First, the majority of the Arabic manuscripts (including the oldest manuscripts Madrid, *Biblioteca Nacional, ms. ar. 5000*, Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*, and Cairo, *Dār al-Kutub, Coll. Taymūr Pāshā, Ḥikma 117*) contain the treatise without displaying any title whatsoever. Ibn Rushd himself does not refer to the present treatise by any title in his other works. Hence, we cannot be sure what title Ibn Rushd chose for this work or whether he intended a separate entitlement in its own right at all[1]. On the other hand, there can be no doubt that Ibn Rushd himself conceived this treatise as a kind of exegetical work on Aristotle's *Metaphysics*, as he states right at the beginning that "in this treatise, we wish to present scientific doctrines gathered from the treatises Aristotle devoted to the science of metaphysics". Secondly, the content and structure of the treatise show certain peculiarities not displayed by the other works usually classified as epitomes (*Jawāmiʿ* or *Mukhtaṣar* in the Arabic); and even those Arabic manuscripts which do display a separate title of the work, do not depict it as an epitome, but simply call it 'Book of Metaphysics' *(Kitāb Mā baʿd al-ṭabīʿa).*

However, we are relatively safe in grouping together the present treatise with the other epitomes Ibn Rushd composed on various Aristotelian works. Basically, Ibn Rushd dealt with Aristotle's works in writings of four different literary genres: (i) literal or so-called 'long commentaries' *(Sharḥ* or *Tafsīr)* quoting and commenting upon the authoritative work section by section in a complete and exhaustive

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1 This uncertainty is reflected in the fact that the five modern Arabic editions of the work display four different titles (cf. below, section 3).

manner; (ii) paraphrases *(Talkhīṣ)*, the so-called 'middle commentaries', i.e. rewordings of the Aristotelian text which avoid for the most part raising any textual problems or dogmatic inconsistencies and are characterized by the highest degree of approval to and coherent representation of the Aristotelian doctrines; (iii) epitomes, i.e. abridged introductions or summaries, in which Ibn Rushd breaks away from the authoritative work at a remarkably higher degree than in the two aforementioned literary forms, secludes any non-demonstrative sections or excursions he encountered in the Aristotelian work or in the commentaries thereon he had at his disposal, and presents what he conceives as the gist of this work in his own words; and (iv) questions or problems (usually entitled "Treatise on...", *Maqāla fī...*, followed either by the problem to be discussed or by the title of the Aristotelian work in which the relevant question occurs), i.e. treatises focusing on well-delimited problems raised in a particular Aristotelian writing, which take into consideration all ancient and "modern" Arabic positions regarding this question[2].

That the present work pertains neither to the class of literal commentaries nor to that of the paraphrases is clear from the fact that both Ibn Rushd's literal commentary on Aristotle's *Metaphysics* as well as his paraphrase are extant and differ substantially from the present text[3].

2 On these four literary genres and their interrelations cf. J. al-ʿAlawī, *Al-Matn al-rushdī: Madkhal li-qirāʾa jadīda*, p. 127–53; idem, "Al-Ghazzālī wa-l-khiṭāb al-falsafī fī l-gharb al-islāmī: al-Ghazzālī wa-tashakkul al-khiṭāb al-falsafī li-bn Rushd," *Majallat Kulliyyat al-Ādāb wa-l-ʿUlūm al-Insāniyya* 8 (1986), esp. p. 28–48. For studies in European languages cf. Thérèse-Anne Druart, "Averroes: The Commentator and the Commentators," in *Aristotle in Late Antiquity*, edited by L. P. Schrenk (Washington: Catholic Univ. of America Press, 1994); Miguel Cruz Hernández, "El sentido de las tres lecturas de Aristóteles por Averroes," in *Ensayos sobre la filosofía en el Al-Andalus*, edited by A. Martinez Lorca (Barcelona: Ed. Anthropos, 1990).

3 The literal commentary is available in the Arabic edition *Averroès: Tafsīr mā baʿd aṭ-Ṭabīʿat.* Texte arabe inédit établi par Maurice Bouyges, 3 vols., Beyrouth: Imprimerie Catholique, 1938–42, and in the Latin translation printed by the Giunta brothers in several editions since 1550, reprinted as *Aristotelis Opera cum Averrois Commentariis*, 9 vols. and 3 supplementa, Frankfurt am Main: Minerva 1962. (A new Latin edition is currently being prepared by Dag N. Hasse, University of Würzburg. For further partial editions and translations into modern languages cf. www.thomasinstitut.uni-koeln.de/averroes_db/averrois_opera.html.) The paraphrase or 'middle commentary' is ex-

Furthermore, it is certainly not an inquiry into a particular topic or problem of Aristotle's *Metaphysics* adhering to the genre of *Maqālāt*. In the introduction to the work, Ibn Rushd states repeatedly that he is addressing here the discipline of metaphysics in its entirety[4]. Also, the structure of the work, and especially of the introduction, leaves no doubt that Ibn Rushd does not focus on a particular metaphysical question, but rather approaches this discipline as such in a systematic and comprehensive manner. As in the other epitomes, Ibn Rushd's diction is rather independent from the Aristotelian work dealt with; there are no literal quotations of the *Metaphysics*, only seldom do paraphrases occur.

Apart from this determination *ex negativo*, there are certain positive indicators corroborating the assumption that we are faced with Ibn Rushd's Epitome of the *Metaphysics*. Above all, we may adduce Ibn Rushd's own statements in this work and in other epitomes. In 1159, Ibn Rushd completed his epitomes of four Aristotelian treatises on natural philosophy *(Physics, De caelo, De generatione et corruptione,* and *Meteorologica)*, which he conceived as a literary unit. In his introduction to this four-part work, which has been preserved in two different versions, Ibn Rushd describes the aim of these epitomes as presenting the "necessary doctrines" *(al-aqāwīl al-ḍarūriyya)* or the "scientific doctrines which render Aristotle's method a necessary method" *(al-aqāwīl al-ʿilmiyya allatī taqtaḍī madhhabahū)*[5]. This seems to be exactly what Ibn Rushd is referring to at the beginning of the treatise presented here, when he says: "In this treatise, we wish to present scientific doctrines *(al-aqāwīl al-ʿilmiyya)* gathered from the treatises Aristotle devoted to the science of metaphysics in the manner we have practised generally in the preceding books." That these "preceding books" alluded to here are none other than these four epitomes is further confirmed by another methodological remark which refers again to "the other [theoretical] sciences" dealt with there and is found

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tant in two Hebrew versions edited by Mauro Zonta in his unpublished dissertation "La tradizione ebraica del Commento Medio di Averroè alla Metafisica di Aristotele," Università di Torino, 1995.

4 Cf. p. 21–27 of the translation.

5 Cf. J. al-ʿAlawī, *Al-Matn al-rushdī: Madkhal li-qirāʾa jadīda*, p. 161; cf. also the introduction of Ibn Rushd's Epitome of the *Organon* (the so-called *Ḍarūrī fī l-Manṭiq*), quoted in J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 50sq.

in almost identical form in the present work and in the Cairo version of the introduction to the four epitomes on natural philosophy. It says that the appropriate method for the acquisition of these sciences is the method of instruction *(naḥw al-taʿlīm/jihat al-taʿālīm)*, that is the method which "proceeds from things better known-to-us to things better known-by-nature"[6]. Remarks of this type are, as far as I can see, not found at the beginning of any of Ibn Rushd's 'middle commentaries'.

Furthermore, there is certain bibliographical evidence for the fact that the treatise presented here indeed was conceived as an epitome shortly after Ibn Rushd's death. In his *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*, Ibn Abī Uṣaybiʿa (d. 1270) mentions Ibn Rushd's "Epitomes of Aristotle's Books on Natural Sciences and Metaphysics" *(Jawāmiʿ kutub Aristūṭālīs fī l-ṭabīʿiyyāt wa-l-ilāhiyyāt)*, in all likelihood referring to the present work and the four epitomes on Aristotle's physical works[7]. Being independent from these biographies two medieval catalogues of Ibn Rushd's writings mention his "Epitomes on Philosophy" *(Jawāmiʿ fī l-falsafa)*[8]. Taking into consideration that Ibn Rushd conceived and introduced the four epitomes on natural sciences as one work of four parts and that this work is commonly entitled, not as Epitomes on *Philosophy*, but rather as Epitomes on *Natural Sciences*, this title may be regarded as further evidence for the fact that the present treatise was grouped together with the epitomes on natural sciences by Ibn Rushd himself or in an early stage of its transmission. This is additionally confirmed by the fact that the work has been transmitted in almost all Arabic manuscripts together with these four epitomes[9].

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6 Cf. below, p. 27 of the translation, and *Averrois Epitome in Physicorum libros*, ed. Josep Puig. Corpus Commentariorum Averrois in Aristotelem. Series A, vol. 20. Madrid 1983, p. 7sq., apparatus criticus. For the affinity of this method and the genre of epitomes cf. J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 52–56.

7 The same reference is found in two other biographies dating from the first half of the fourteenth century, i.e. the *Taʾrīkh al-islām wa-wafayāt al-mashāhīr wa-l-aʿlām* by Shams al-Dīn al-Dhahabī (d. 1348), and the *Kitāb al-Wāfī bi-l-wafayāt* by Ṣalāḥ al-Dīn al-Ṣafadī (d. 1363); cf. J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 12, 15.

8 Cf. *ibid.*, p. 11sq., 15. The earlier of these catalogues is found in a manuscript dating from Jumādā II 637 / January 1240; cf. *Commentaria Averrois in Galenum*, edidit María de la Concepcíon Vázquez de Benito, p. 281, 283.

As for the above-mentioned peculiarities of the present treatise regarding the genre of Ibn Rushd's epitomes, this concerns primarily the following two features. All other epitomes of Aristotelian works composed by Ibn Rushd follow the textual order of the authoritative writing by Aristotle. Not so the present work, which re-arranges the materials found in the *Metaphysics* in an entirely new way. Secondly, while the other epitomes cover the contents of the relevant Aristotelian works more or less completely, this is not the case with the present work, and this in a deliberate manner. As Ibn Rushd explains right at the outset of the writing, he intends, not to provide a complete synopsis of the Aristotelian work, but "to present scientific doctrines *gathered from (naltaqiṭa min)* the treatises Aristotle devoted to the science of metaphysics". In other words, Ibn Rushd does not claim completeness and proceeds rather selectively.

The most striking evidence for the re-arrangment of the Aristotelian work is supplied by the fact that the latter is divided into fourteen books, whereas Ibn Rushd explains that its contents can be arranged in three main parts, and divides his treatise into five chapters. In the introduction, he says:

> "We find this [science] unfolded in the [single] treatises [of the *Metaphysics*] attributed to Aristotle. However, it can be reduced to three [major] parts [as follows]. [(I)] In the first part [Aristotle] takes into consideration [(I.a)] sensible things inasmuch as they are existents, all their genera which form the ten categories, and [(I.b)] all their concomitants which adhere to them, and relates [all] this to what is first in them, as far as this is possible in this part [of metaphysics]. [(II)] In the second part he takes into consideration the principles of substance—these are the separate things—, explains their mode of existence, relates them likewise to their first principle, which is God (exalted is He), explains His specific attributes and acts, and shows also the relationship between Him and the remaining existents and [the fact] that He is the utmost perfection, the first form, and the first agent [...].

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9 To which, in most manuscripts, also the Epitome on Aristotle's *De anima* has been appended. As a matter of fact, this conjoined manuscript transmission of the present treatise as a sequel of the epitomes on natural philosophy might be the reason for the subheading-like title 'Book of Metaphysics' we encounter in some of the younger manuscripts. This title just assumes as self-evident that in what follows the series of epitomes is continued. In some manuscripts, such a continuation is explicitly stated in the colophon of the preceding epitome.

> [(III)] In the third part he takes into consideration the subject matters of the departmental sciences and eliminates the mistakes committed by the ancients on this [subject], namely in the discipline of logic and in the two departmental disciplines, that is physics and mathematics."

From internal references to this division and the following discussion of the Aristotelian doctrines it becomes clear how these three main parts relate to the Aristotelian text. *Part I.a* comprises Books VII (Z) and VIII (H) of the *Metaphysics*. In his discussion of these books, Ibn Rushd proceeds here and there rather independently by grouping together what in his view belongs together (such as VII [Z] 12 and VIII [H] 6, both of which deal with the unity of definition) or by postponing questions because they require the previous consideration of subsequent sections of these books (such as the question whether the three corporeal dimensions are substances raised in VII [Z] 2, 1028 b 16sqq., yet explicitly postponed by Ibn Rushd to the end of this part).

Part I.b falls into three sections. The first section contains most of Book IX (Θ) to be discussed by Ibn Rushd in the following order: Chs. 1–3 (kinds of potencies, the Megarian position), Chs. 5–8 (actualization of potencies, actuality, priority of actuality) including a short excursion on Book II (α) 1, 993 b 23–31, first half of Ch. 9 (good and evil in actuality and potentiality), Ch. 10 (truth). In the second section, Ibn Rushd treats the contents of Book X (I) as follows: Chs. 1–4 (the one and the many, contrariety), Chs. 7–10 (intermediates in contrariety, contrariety in species and genus), Ch. 6 (aporia regarding the opposition of the one and the many), Ch. 5 (aporia regarding the opposition of small, great and equal). The third section comprises Aristotle's discourse on the finiteness of causal chains provided in *Metaphysics* II (α) 2.

Ibn Rushd's explanations on *Part II* start with a section on *Metaphysics* XII (Λ) 6–7, which draws intensely on Aristotle's *Physics* VIII 1–3, and 7–8. The second section of this part is constituted by Book XII (Λ) 8–10, which is discussed in much greater detail than the preceding section and by taking into account various works by Alexander of Aphrodisias, al-Fārābī, Ibn Sīnā, and others. References to Chs. 1–5 of this Book occur only incidentally and very briefly.

The contents of *Part III* can only be reconstructed on the basis of internal references and of Ibn Rushd's statements on the structure of the *Metaphysics* propounded in his Literal Commentary on this work, because the relevant chapter of the present treatise is not extant. In Ibn

Rushd's conception, this part comprises Book IV (Γ) 4–8 (possibly also the correlate Chs. 4–7 of Book XI [K]), Aristotle's defense of the validity of the first principles of demonstration, and Books XIII (M) and XIV (N) which, in Ibn Rushd's view, deal primarily with the subject matters of mathematics and physics and errors committed by the ancients (i.e. Plato and the Pythagoreans) on this subject[10].

These three major parts of the *Metaphysics* relate to the subdivision of the present treatise as follows.

Part	*Chapter*	*Section of Aristotle's 'Metaphysics'*
I.a	Two	VII (Z) and VIII (H)
I.b	Three	IX (Θ), 1–3, 5–8; II (α) 1; IX (Θ), 9–10; X (I) 1–4, 7–10, 6, 5; II (α) 2
II	Four	XII (Λ) 6–10 (occasional ref. to XII [Λ] 1–5)
III	[Five] (not extant)	IV (Γ) 4–8 (possibly XI [K] 4–7); XIII (M) and XIV (N) (partially?)

Chapter One of our treatise, which has no correspondence to any of the three main parts, is divided into two sections: (A) an introduction which deals, following the commentary tradition of late antiquity, with the subject matter, aim, and usefulness of metaphysics, and (B) a glossary of twenty-eight fundamental terms of metaphysics. The purpose of both sections is described as introductory and preparatory. In the introduction (A), Ibn Rushd considers, in addition to his own contributions to the topics in question, the following sections of the *Metaphysics* (in this order): 1. Book IV (Γ) 1 (there is a universal science which studies being *qua* being). 2. Book VI (E) 1 (metaphysics is one of three theoretical sciences, besides physics and mathematics). 3. Book IV (Γ) 2 (there are universal concomitants of all existents which cannot be considered by any other science except the one which has being as such as its subject matter). 4. Book IV (Γ) 3 (the principles [and subject matters, as Ibn Rushd adds] of the departmental sciences must be stud-

10 I have dealt with *Part III* of Ibn Rushd's division of the *Metaphysics* and the unpreserved fifth chapter of the present treatise separately in the article "On the Nature and Fate of Chapter V of Ibn Rushd's *Epitome* of Aristotle's *Metaphysics*."

ied and verified by metaphysics). 5. Book VI (E) 1 (metaphysics is the supreme science because it deals with most remote causes the knowledge of which is the end and completion of the theoretical sciences).

The following glossary (B) deals with twenty-five notions explained in the thirty chapters of Book V (Δ). In addition, Ibn Rushd includes three paragraphs on notions not discussed in this book of the *Metaphysics*, namely 'thing', 'matter', and 'form'. The paragraph on 'being' of this section is the only part of the treatise which draws additionally on *Metaphysics* VI (E) 2–4.

In view of the fact that what Ibn Rushd calls *Part I* of the *Metaphysics* is not dealt with until Chapter Two of the treatise, and that the contents of Chapter One are characterized as preliminary, we are thus quite safe in judging that Books IV (Γ) 1–3, V (Δ), and VI (E) were conceived by Ibn Rushd as a sort of logical and epistemological propaedeutics and introduction to the major concepts of what he considered as metaphysics proper[11]. The selective and independent approach to the contents and structure of the *Metaphysics* comes also to the fore in the way Ibn Rushd deals with Book III (B). Obviously, Ibn Rushd did not consider the catalogue of metaphysical aporiae presented there as a map or program for the *Metaphysics*. He follows Ibn Sīnā[12] in transposing selected aporiae into the relevant contexts of his discussion. The dialectical character of this book did not fit into Ibn Rushd's program of the purely demonstrative structure of the epitomes.

2. Transmission, revision, and completeness of the treatise

The present treatise is preserved in 17 Arabic manuscripts dating from the thirteenth to the nineteenth centuries. During the first half of the thirteenth century it was translated into Hebrew twice: the translation prepared by Moses Ibn Tibbon is preserved in at least 14 manuscripts, while another, anonymous, translation is quoted in books IX and X of

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11 The same approach is displayed in the introductions to Books IV (Γ) and XII (Λ) of Ibn Rushd's Literal Commentary *(Tafsīr)* on the *Metaphysics*. It is heavily influenced by Alexander of Aphrodisias' conception of metaphysics, as I try to show in my "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

12 And Nicolaus of Damascus, cf. A. Bertolacci, *The Reception of Aristotle's* Metaphysics *in Avicenna's* Kitāb al-Šifāʾ, p. 409–40, Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

Ibn Falaquera's *Deʿot ha-filosofim*, of which we have two manuscripts. The Hebrew version by Ibn Tibbon was translated into Latin by the famous Italian physician and translator Iacob Mantino ben Samuel and printed for the first time in 1523 in Bologna.

As mentioned above, the treatise as we have it today is incomplete. All versions transmit unanimously Ibn Rushd's declaration in the introduction that he had divided the work into five chapters, as well as his repeated references to the fifth chapter. However, all versions break off after the end of the fourth chapter. It is not clear whether the absence of Chapter Five was caused by a codicological mishap in an early stage of the transmission or by Ibn Rushd's—unrealized—plan to revise or entirely re-write this chapter. What can be excluded with certainty is that its absence was caused by Ibn Rushd's deliberate decision either never to compose it or to delete an early version without any substitute, as claimed in the colophon of some manuscripts[13].

That Ibn Rushd indeed revised the present treatise—presumably several times—can be inferred from the following observations. First, in all probability he began working on it shortly after having completed the "Epitomes on Natural Philosophy"[14], that is in the early sixties of the twelfth century. As already recognized by al-ʿAlawī[15] the treatise as we have it today contains a reference to Ibn Rushd's *Long Commentary on the Metaphysics*. This reference occurs in a section transmitted in two versions the earlier of which lacks the reference[16]. Accordingly, the second version including the reference must have been added during or after the composition of the literal commentary on the *Metaphysics*, which dates from a late period, probably from the years 1192–94[17].

13 This problem is discussed in detail in my article "On the Nature and Fate of Chapter V of Ibn Rushd's *Epitome* of Aristotle's *Metaphysics*," cf. also below, note 688.

14 Cf. M. Alonso, *Teología de Averroes* p. 56, 67sq., J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 57sq.

15 Cf. *ibid.*, p. 58.

16 Cf. p. 73, l. 5–7 of the translation, and note 254.

17 Cf. J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 109sq., M. Bouyges, *Notice*, p. XXV. As a matter of fact, a reference found in the literal commentary ("We have mentioned ... at another place," *Tafsīr Mā baʿd al-ṭabīʿa*, p. 1279, l. 15 – p. 1280, l. 1) is in all likelihood to the present Epitome of the *Metaphysics*; cf. below, note 439. If this is in fact the case, the composition of the literal commentary and the revision of the present treatise must have taken place at least partially at the same time; cf. also p. 259sq., note 352.

Other references point in the same direction, e.g. two references to "the natural sciences" seem to relate to the paraphrase *(Talkhīṣ)* of *De caelo* composed in 1171[18]. Again another reference, now to what "has been discussed elsewhere" very likely directs us to Ibn Rushd's *Tahāfut al-tahāfut*, a work he wrote after 1170, in all probability after 1180[19].

Unlike the above-mentioned reference to the *Long Commentary on the Metaphysics*, these references do not occur in sections transmitted in more than one version. This may possibly point to the fact that the splitting of the transmission testified by sections transmitted in more than one version is to be dated after approximately 1180. The manuscripts I had at my disposal contain eight sections of varying length transmitted in more than one version[20]. In most of these cases, the manuscripts display two versions, in some cases even three, where the third version consists either in subsequent copies of the two versions transmitted in the other manuscripts or in a hybrid combination of these[21].

In all cases, these sections fit coherently in the overall context. As their contents concern topics which are known to have posed a problem to Ibn Rushd and to have caused constant grappling and modification of his approach, such as the role of universal forms in the generation of living beings, the spontaneous generation of animals, or the one *qua* principle of numbers, there can be little doubt that we are faced with authentic revisions by Ibn Rushd himself[22]. This assumption is further born out by passages transmitted in one branch of the manuscripts, yet omitted in the other. As far as the absence of such passages cannot be explained through omission by homoioteleuton, these passages may be considered as later additions by Ibn Rushd[23].

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18 Cf. below, p. 145, lines 4 and 11 of the translation, and notes 566 sq. For the date cf. Ibn Rushd, *Talkhīṣ al-samāʾ wa-l-ʿālam,* ed. J. al-ʿAlawī, p. 46 sq.

19 Cf. below, p. 168 ult. of the translation, and note 642. For the date cf. Ibn Rushd, *Tahāfut al-tahāfut,* ed. M. Bouyges, p. XI sq., J. al-ʿAlawī, *Al-Matn al-rushdī*, p. 100 sq.

20 These sections are found in the translation on p. 37, 65 sq., 71, 73, 93 sq., 112–14, and 171–74, printed in two columns.

21 Whenever the transmission of integral sections splits up into three branches it can thus be reduced to exactly two competing versions.

22 That Ibn Rushd revised the epitomes in later periods of his project is also known from other works, such as the epitomes on *De anima* and the *Physics*.

23 Such additions occur on p. 40 sq., 60, 61 sq., 72 sq., 111 sq., 118, 123 sq., 128,

Provided the above assumption is correct, the extant manuscripts thus reflect at least three different stages of Ibn Rushd's work on the present treatise, namely the initial period of the original composition in the early sixties of the twelfth century, the first stage of revision up to around 1180, and a second stage of revision contemporaneous with the composition of the *Long Commentary on the Metaphysics*[24]. The absence of Chapter Five even points to a third stage of revision, now devoted to the intense revision or complete re-writing of this chapter. Obviously, Ibn Rushd could not complete this final stage of revision, probably due to the political and biographical turbulences that marked the last years of his life and, finally, his death in 1198.

3. Editions and previous translations

There are five editions of the Arabic text of the present treatise, none of which meets the requirements of definitive critical editions. In chronological order these are:

1. *Kitāb Mā baʿd al-ṭabīʿa*. [Edited by] Muṣṭafā al-Qabbānī. Cairo: al-Maṭbaʿa al-adabiyya, n.d. [1905?].

Al-Qabbānī's edition is solely based on ms. Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*. It is marked by misreadings, omissions, and deliberate changes to the wording of the manuscript.

168, and 178 of the translation, as noted in the relevant footnotes to the text. In most cases, the additions are transmitted in all manuscripts to the exclusion of ms. Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*. Hence, we may conclude that this manuscript represents an earlier stage of revision of the present treatise. As this manuscript also lacks the two references to the *Long Commentary on the Metaphysics* and to the *Tahāfut al-tahāfut* mentioned above, the manuscript from which it was copied might possibly go back to a version copied before approximately 1180. However, since ms. Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5* is also otherwise unreliable and lacunose, we must be cautious with these kinds of inferences.

24 Among the causes that motivated these revisions one might take into account Ibn Rushd's re-consideration of the Aristotelian work during the composition of the paraphrase and the literal commentary on the *Metaphysics*. The former possibly dates from the year 1174; cf. M. Alonso, *Teología de Averroes* p. 65, 85 sq.

2. *Compendio de Metafísica*. Texto árabe con traducción y notas de Carlos Quirós Rodríguez. Madrid: Imprenta de Estanislao Maestre, 1919.

This edition is based on two manuscripts, ms. Madrid, *Biblioteca Nacional, ms. ar. 5000* and the Cairo manuscript used by al-Qabbānī. It is not free of misreadings, but much more reliable than al-Qabbānī's edition. However, there is no apparatus criticus for the numerous discrepancies between the two manuscripts; and in many cases, Quirós Rodríguez has fabricated his own text by mixing up the two manuscripts. The edition has been reprinted twice:

2.1 *Averroes. Compendio de Metafísica*. Presentación Josep Puig Montada. Edición Pedro Bazán Correa. Córdoba: Universidad de Córdoba, 1998.

2.2 *Abū l-Walīd Ibn Rushd. Kitāb ʿIlm mā baʿd aṭ-ṭabīʿa (Compendio de metafisica): Texto árabe de Carlos Quirós Rodríguez.* Edited by Fuat Sezgin. Publications of the Institute for the History of Arabic-Islamic Science. Islamic Philosophy, vol. 57. Frankfurt am Main: Institute for the History of Arabic-Islamic Science, 1999.

3. *Kitāb Mā baʿd al-ṭabīʿa li-l-Faqīh al-Qāḍī al-ʿAllāma Abī l-Walīd Muḥammad ibn Aḥmad ibn Muḥammad ibn Rushd al-Qurṭubī*. Rasāʾil Ibn Rushd, vol. 6. Hyderabad: Maṭbaʿat Dāʾirat al-Maʿārif al-ʿUthmāniyya, 1365/1946.

This edition is based on a manuscript of the *Kitābkhāna-i Āṣafīya-i Sarkār-i ʿAlī* in Hyderabad[25], which sometimes supports the readings of ms. Madrid, *Biblioteca Nacional, ms. ar. 5000*, sometimes those of ms. Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*, and at other places proceeds independently. In the margins, the edition occasionally gives the variant readings of ms. Hyderabad, *Maktabat Dāʾirat al-Maʿārif al-ʿUthmāniyya, Acq[uisition] 665*, referred to by the siglum د.

4. *Talkhīṣ Mā baʿd al-ṭabīʿa.* Ḥaqqaqahū wa-qaddama lahū ʿUthmān Amīn. Cairo: Muṣṭafā al-Bābī al-Ḥalabī, 1958.

In addition to the two manuscripts used by Quirós Rodríguez, Amīn relies on ms. Cairo, *Dār al-Kutub, Coll. Taymūr Pāshā, Ḥikma 117*, which is certainly a step forward for the constitution of the text. However, Amīn's choice between variant readings of the three manuscripts is rather unsystematic. On a number of occasions he arbitrarily implements modifications to the actual wording of these manuscripts

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25 Presumably, this is the undated *ms. 597* which contains, according to the library catalogue, the *Rasāʾil Ibn Rushd*; cf. Mīr ʿUthmān ʿAlīkhān Bahādur, *Fihrist-i kutub-i ʿarabī wa-farsī wa-urdū makhzūna-i Kitābkhāna-i Āṣafīya-i Sarkār-i ʿAlī.* 4 vols. Hyderabad: Dār al-Ṭabʿ Jāmiʿa-i ʿUthmānīya-i Sarkār-i ʿAlī, 1332/1914–1355/1936, vol. 4, p. 488.

or the order of the text without manuscript evidence (often following suggestions by al-Qabbānī or by Van den Bergh in the notes to his translation, cf. below, **#11**). Amīn's edition, which depicts the text erroneously as a Paraphrase *(Talkhīṣ)*, has been reprinted in Teheran:

4.1 *Talkhīṣ Mā baʿd al-ṭabīʿa*. Ḥaqqaqahū wa-qaddama lahū ʿUthmān Amīn. Majmūʿa-i Āshnāʾī bā Falsafa-i Gharb, vol. 9. Teheran: Intishārāt-i Ḥikmat, 1377/1998.

5. *Risālat Mā baʿd al-ṭabīʿa.* [Ed.] Jīrār Jihāmī. Taqdīm wa-ḍabṭ wa-taʿlīq Rafīq al-ʿAjam. Rasāʾil Ibn Rushd al-Falsafiyya, vol. 6. Beirut: Dār al-Fikr al-Lubnānī, 1994.

This edition is basically a reprint of edition # **3**, to which the editors supplied some corrections and modifications. Furthermore, the segmentation of the text is different, and sub-headings have been added.

While there is no edition of the medieval Hebrew translations available, Iacob Mantino's Latin translation of Ibn Tibbon's Hebrew version has been printed several times. The first edition, not available to me, appeared in 1523 in Bologna, dedicated to Hercules (Ercole) Gonzaga, bishop of Mantua. In the following four decades, at least four further editions appeared.

6. *Averroys Epithoma totius Metaphisices Aristotelis in quattuor secatvm tractatvs.* Interprete Iacob Mantin Dertvaensi Hebreo artivm et medicinae Doctore ad Ill.m Principem ac D.R.D. Hercvlem Consagam, electvm Mantvanvm. Ad instantiam heredum Benedicti Hectoris, bibliopolae Bononiensis, anno Domini 1523, die 3 decembris[26].

7. "Epithoma Averrois in Librum Metaphysicae. Iacob Mantin medico hebreo interprete." In *Averrois Cordvbensis Epithoma totius Metaphysices Aristotelis. Prohemium duodecimi libri Metaphysices. Eivsdem Paraphrases in Libris quatuor de Cœlo, & duobus de Generatione & corruptione Aristotelis.* Venetiis apud Hieronymum Scotum, 1542, p. 2–156[27].

8. "Averrois Cordvbensis Epitome in librvm Metaphysicæ Aristotelis. Iacob Mantino hebræo medico interprete." In *Aristotelis Metaphysicorvm libri XIIII. Cum Averrois Cordvbensis in eosdem commentariis, et Epitome. Theophrasti Metaphysicorum liber.* Vol. 8 of *Aris-*

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26 Cf. *Index Aureliensis* # 109.809.

27 Cf. *Index Aureliensis* # 109.818. A scan of this edition is accessible online via www.thomasinstitut.uni-koeln.de/averroes_db/links.html.

totelis Opera cum Averrois Commentariis. Venetiis apud Iunctas, 1562, fol. 356r–397r[28].

Reprinted, with identical foliation, in:

8.1 *Aristotelis Opera cum Averrois Commentariis.* 9 vols. and 3 supplementa. Frankfurt am Main: Minerva, 1962.

There are three previous modern translations of the Arabic text. Horten's translation is based on ms. Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*. The other two translations have been prepared from this Cairo manuscript plus ms. Madrid, *Biblioteca Nacional, ms. ar. 5000*. Van den Bergh also takes the Latin translation by Mantino into consideration.

9. *Die Metaphysik des Averroes (1198†).* Nach dem Arabischen übersetzt und erläutert von Max Horten. Abhandlungen zur Philosophie und ihrer Geschichte, vol. 36. Halle an der Saale: Max Niemeyer, 1912. Reprint, Frankfurt am Main: Minerva, 1960.

10. *Compendio de Metafísica*. Texto árabe con traducción y notas de Carlos Quirós Rodríguez. Madrid: Imprenta de Estanislao Maestre, 1919. Reprinted in # **2.1**.

11. *Die Epitome der Metaphysik des Averroes.* Übersetzt und mit einer Einleitung und Erläuterungen versehen von Simon Van den Bergh. Veröffentlichungen der De Goeje-Stiftung, vol. 7. Leiden: Brill, 1924.

4. The present translation and notes

The present translation is based on a complete collation of eight Arabic manuscripts and edition # 3, which represents a ninth manuscript, otherwise not accessible to me[29]. Additionally, the Arabic manuscripts have been completely collated with I. Mantino's Latin translation. It goes without saying that a definitive *constitutio textus* is not possible until the remaining Arabic manuscripts, not available to me, have been

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28 A scan of this edition is accessible online at http://gallica.bnf.fr. Two further editions of *Aristotelis Opera* including Mantino's translation appeared in Venice in 1552 (apud Iunctas) and 1560 (apud Cominum de Tridino Montisferrati); cf. *Index Aureliensis* # 108.193 and # 108.423; Ferdinand Edward Cranz, *A Bibliography of Aristotle Editions, 1501–1600.* 2d ed. with addenda and revisions by Charles B. Schmitt. Bibliotheca Bibliographica Aureliana, vol. 38. Baden-Baden: Valentin Koerner, 1984, p. 55, 75.

29 For these manuscripts cf. above, note 25, and the list of sigla, below.

collated and considered regarding their filiation. However, the text reconstructible on the basis of these ten testimonies is considerably more reliable than the versions accessible in the previous editions.

For the constitution of the text, one has to keep separate, in general, sections revised by Ibn Rushd *and* transmitted in more than one version from the remaining text. Sections of this type are printed in the translation in two columns, and their manuscript transmission is explained in the relevant footnotes. In some cases, one of the two reconstructible versions has been transmitted in one manuscript only. Accordingly, the degree of uncertainty inherent in such a unique transmission is remarkably higher than in the second version. In view of the intense contamination of the transmission, I refrained from attempting to identify and present the other stages of revision as well by specific modes of layout. Instead of this, problems of different versions and revisions are discussed in the endnotes.

As for the remaining text, the filiation of the manuscripts is divided into two main branches: on the one side (α) mss. *A, D, H, M,* and *Q*, on the other side (β) mss. *G, P, R,* and *T*. However, with the exception of mss. *H* and *M*, all testimonies including Mantino's translation are contaminated with variant readings adopted from the other branch of filiation. The oldest manuscripts, *H, M,* and *Q*, belong to family (α) which is thus reconstructible in a more reliable way than family (β). Ms. *Q* is closely related to ms. *H*; however, its *Vorlage* must have been contaminated by ms. *M* or one of its apographs. Mss. *A* and *D* show traces of both lines of family (α). The most important manuscript of family (β) is ms. *P*, which stems from an early representative of this family and is less heavily contaminated from the side of family (α) than the remaining mss. of this branch. Mss. *G* and *T* are closely related and stem from an ancestor heavily contaminated by variant readings from ms. *Q*. Ms. *Q* is also the manuscript which shows the closest relation to the Hebrew manuscript(s) used by I. Mantino.

At some places, edition # 8 of Mantino's translation indicates at the margins variant readings by the abbreviation *a.l.* (= alia lectio). In all likelihood, such notes point, not to variant readings of the Latin translation, but rather to those in the Arabic manuscripts. E.g. the reading 'genus' instead of 'corpus' (fol. 374rb) suggests the manuscript transmission of *'jins'* instead of *'jism'*, that of 'concordia' instead of 'copulatiua' (fol. 375rb) the reading *'ijmāʿ* instead of *jimāʿ*. Some of these variant readings are not attested by any of the Arabic manuscripts at my disposal.

As the translation below draws on my own reconstruction of the text based on the collation of these ten testimonies, it often deviates from the wording found in the above-mentioned Arabic editions. Noting each variant reading would have required a complete apparatus criticus in its own right—an undertaking obviously inappropriate for the publication of a translation. Therefore, information about the Arabic text has been restricted to three modes of presentation. (i) The most important variants of the manuscripts and deviations from the Arabic editions have been noted in footnotes underneath the translation (referred to by superscript letters). (ii) Whenever problems of the transmission concern entire paragraphs of the text, e.g. sections transmitted in more than one version and similar cases, the reconstructed Arabic text which served as the basis of the translation is quoted in the relevant endnote. (iii) A number of less significant problems of the *constitutio textus* are discussed en passant in the endnotes (referred to by bracketed numbers).

In a few exceptional cases the translation deviates from all ten testimonies. In these cases, I assume an omission or mistake handed down from the initial stage of transmission. That the archetype of the ten testimonies was not perfect is clear from two lacunae present in all manuscripts including Mantino's translation[30]. In three cases I assume omissions of one or two words[31]; in two other cases I assume genuine scribal errors[32]. Furthermore, a number of deviations consist in minor modifications of wrongly dotted Arabic words.

In general, I have tried to translate as literal as possible, to preserve the terminological and phraseological details and peculiarities, to uncover Ibn Rushd's intention as precise as possible, and to be consistent in all this[33]. The previous modern translations have been taken into

30 Cf. p. 64, footnote (a), and p. 80, footnote (c).

31 The relevant conjectural additions are printed in the translation between angle brackets and explained in the footnotes; cf. p. 21, footnote (a), p. 44, footnote (a), p. 50, footnote (a).

32 Cf. p. 97, footnote (a), p. 131, footnote (a), and the related endnotes 347 and 506.

33 However, sometimes these aims come into conflict. A good example is the expression *al-ʿilm al-ṭabīʿī* which, in the present treatise, may mean (i) natural sciences/philosophy as a discipline, (ii) Aristotle's works on natural philosophy, (iii) Ibn Rushd's commentaries on Aristotle's works on natural philosophy, (iv) Aristotle's *Physics* in particular, and (v) one of Ibn Rushd's writings on Aristotle's *Physics*. In my translation of this term I discarded terminological

account for each part of the work. Van den Bergh's notes, though often missing the mark, provided lots of useful hints. As compared to these earlier works, I had the great advantage of having at my disposal a number of texts not available at that time. E.g. the first chapter of the treatise draws heavily on al-Fārābī's *Kitāb al-Ḥurūf* the consultation of which helped clarify a number of difficult sections. Many problems of the constitution of the text and its meaning could be solved by taking into consideration Ibn Rushd's *Tahāfut al-tahāfut* and, especially, the corresponding sections of the *Long Commentary on the Metaphysics*. The same holds true for the Arabic versions of works composed by (or ascribed to) Alexander of Aphrodisias intensely referred to by Ibn Rushd in the fourth chapter, yet unavailable to the previous translators.

In the translation below, words, phrases, or paragraph numbers added in order to render the text more fluent and unambiguous or to make the structure of the argument readily accessible are set between square brackets. The same applies to the translation of personal pronouns replaced by the relevant word or concept to which they refer and to translations of implied subjects or objects of finite verbs. In order to facilitate the comparison with the Arabic and Latin texts, page and folio numbers of the three most widespread Arabic editions and the Latin edition # 8 (resp. 8.1) are given in the margins of the translation.

While the footnotes indicate major problems of the constitution of the text and of the previous translations, the endnotes aim at other purposes. First, they serve to indicate the relevant sections of Aristotle's *Metaphysics* and other works commented upon or referred to by Ibn Rushd. Secondly, I tried there to supply exact references to the available editions for Ibn Rushd's references to other works of his as well as to point out interesting or more detailed discussions of a topic in other works. Thirdly, the endnotes discuss and explain difficult sections of the treatise and suggest further reading. Finally, special attention is paid to Ibn Rushd's terminology and its roots in the earlier Arabic philosophy and in the Graeco-Arabic translations. All translations in the footnotes and endnotes are mine, unless otherwise indicated.

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consistency and aimed at precision. In other words, when it was evident that Ibn Rushd referred to a particular passage in Aristotle's *Physics* or to his epitomes of Aristotle's physical writings rather than to the discipline of natural philosophy in general, I made this explicit in the translation.

SIGLA AND ABBREVIATIONS

Sigla

1. Manuscripts

A	Hyderabad, *Kitābkhāna-i Āṣafīya-i Sarkār-i ʿAlī*, as printed in edition # 3 (cf. above, p. 12).
D (*D*^{marg})	Dublin, *The Chester Beatty Library, ms. 4523* (marginal corrections in *D*).
G (*G*^{marg})	Princeton, *Yahuda Section of the Garret Collection of Arabic Manuscripts in the Princeton University Library, ms. 860* (marginal corrections in *G*).
H	Cairo, *Dār al-Kutub, al-Ḥikma wa-l-Falsafa 5*.
M (*M*^{marg})	Madrid, *Biblioteca Nacional, ms. ar. 5000* (marginal corrections in *M*).
P	Princeton, *Yahuda Section of the Garret Collection of Arabic Manuscripts in the Princeton University Library, ms. 849.*
Q (*Q*^{2}/*Q*$^{a.m.}$)	Cairo, *Dār al-Kutub, Collection Taymūr Pāshā, Ḥikma 117* (additions and correction by the same hand/by another hand).
R	Rampur, *Raza Library, ms. ع 3609 (*olim *Kitābkhāna-i Riyāsat-i Rāmpūr, ms. 3905).*
T (*T*^{marg})	Teheran, *Kitābkhāna-i Markazī-yi Dānishgāh-i Tihrān, Coll. Mishkāt, ms. 275* (marginal corrections in *T*).

2. Editions (page/folio concordance given in the margins)

a	*Talkhīṣ Mā baʿd al-ṭabīʿa.* Ḥaqqaqahū wa-qaddama lahū ʿUthmān Amīn. Cairo: Muṣṭafā al-Bābī al-Ḥalabī, 1958.

j *Risālat Mā baʿd al-ṭabīʿa.* [Ed.] Jīrār Jihāmī. Taqdīm wa-ḍabṭ wa-taʿlīq Rafīq al-ʿAjam. Rasāʾil Ibn Rushd al-Falsafiyya, vol. 6. Beirut: Dār al-Fikr al-Lubnānī, 1994.

m "Averrois Cordvbensis Epitome in librvm Metaphysicæ Aristotelis. Iacob Mantino hebræo medico interprete." In *Aristotelis Metaphysicorvm libri XIIII. Cum Averrois Cordvbensis in eosdem commentariis, et Epitome. Theophrasti Metaphysicorum liber.* Aristotelis Opera cum Averrois Commentariis. Vol. 8. Venetiis apud Iunctas, 1562.

q *Compendio de Metafísica*. Texto árabe con traducción y notas de Carlos Quirós Rodríguez. Madrid: Imprenta de Estanislao Maestre, 1919.

Abbreviations

An. post.	Aristotle, *Posterior Analytics*
c.	cum, used together with
CAG	Commentaria in Aristotelem Graeca
Cat.	Aristotle, *Categories*
De gen. et corr.	Aristotle, *De generatione et corruptione*
def.	Definition
ed.	Edition, edited by
GALex	Endress, Gerhard, and Dimitri Gutas, eds., *A Greek & Arabic Lexicon (GALex): Materials for a Dictionary of the Mediæval Translations from the Greek into Arabic.* Leiden: Brill, 2002–.
K.	Kitāb
Lit.	Literally
Metaph.	Aristotle, *Metaphysics*
ms. (mss.)	Manuscript(s)
s.v.	sub voce, under the word
transl.	translation, translated by
vs.	versus
WGAÜ	Ullmann, Manfred, *Wörterbuch zu den griechisch-arabischen Übersetzungen des 9. Jahrhunderts*. Wiesbaden: Harrassowitz, 2002; idem, *Wörterbuch*

	zu den griechisch-arabischen Übersetzungen des 9. Jahrhunderts. Supplement. 2 vols. Wiesbaden: Harrassowitz, 2006–2007.
WKAS	Deutsche Morgenländische Gesellschaft, *Wörterbuch der Klassischen Arabischen Sprache*. Bearbeitet von Manfred Ullmann. Wiesbaden: Harrassowitz, 1970–.
[ ]	Added by the translator, in order to render the text more fluent and clear-cut.
⟨ ⟩	Translation of a conjectural addition to the text of the manuscripts.
{ }	Translation of words found in the manuscripts, which appear to be redundant.
† ... †	Omission in the Arabic manuscripts, which cannot be restored.

[Abū l-Walīd Muḥammad ibn Rushd's So-called Epitome of the *Metaphysics*]

In the Name of God, the Merciful, the Compassionate

⟨CHAPTER ONE⟩ [a]

In this treatise, we wish to present scientific doctrines gathered from [1] the treatises Aristotle devoted to the science of metaphysics in the manner we have practised generally in the preceding books [2]. Accordingly, we shall start by supplying information on the aim of this science, its usefulness, its parts, its place [in the order of the sciences] and its relationship [with the other sciences], in short, we begin with that the consideration of which may help to get access to this science [3]. a1 j29 m356r q5

We say: As mentioned elsewhere [4] there are three sorts of disciplines and sciences: [(i)] theoretical disciplines (these are [the disciplines] which aim at nothing but knowledge), [(ii)] practical disciplines (these are [the disciplines] in which knowledge is [sought] for the sake of deeds), [(iii)] disciplines which serve and guide these [theoretical and practical sciences], namely the logical disciplines. Furthermore, it has been mentioned in the *Book of Demonstration* that there are two sorts of theoretical disciplines: universal and departmental [5]. Universal [disciplines] are those which take into consideration being as such and its essential concomitants. There are three such [disciplines]: a2 q6

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a All manuscripts begin, as usual, with the Basmalah. Only the relatively young manuscripts *D, P*, and *T* display, after the Basmalah, a title in its own right, namely *Kitāb mā baʿda l-ṭabīʿa*, 'Book of Metaphysics'. The chapter heading added here is omitted in all manuscripts. However, all manuscripts indicate the beginning of the following chapters, starting with Chapter Two (cf. below, p. 52 of the translation), and Ibn Rushd refers to the present section of the work explicitly as "Chapter One" (*al-maqāla al-ūlā*, cf. below, p. 26). Ms. *M* adds after the Basmalah "It says the judge Abū l-Walīd Muḥammad ibn Aḥmad ibn Muḥammad ibn Rushd (may God be pleased with him)."

dialectic, sophistics, and this science [of metaphysics] [6]. The departmental [disciplines], on the other hand, take into consideration being in a certain disposition.

j30 At the same place, it is said that there are only two departmental [disciplines]: physics (this is the [discipline] which takes into consideration changeable being) and mathematics (the [discipline] which takes into consideration quantity as something separated from matter) [7]. All this has been laid down [generally] in the *Book of Demonstration*[a], and we have to take it into consideration in the present context.

We say: As for the division of these theoretical sciences into these three parts only, this is a necessary consequence of the division of beings themselves into the three kinds [mentioned above][b]. For, if one examines the beings, one finds that some of them are constituted in matter, and consequently one takes into consideration this species of beings and their concomitants independently (as is clear to anybody practising physics), and one finds also some [beings] in the definition of which matter does not occur, though they exist in matter (as is clear[c] to anybody considering mathematics), and consequently all species of these [beings] and their concomitants are taken into consideration again independently. And since in physics there appeared other principles which are neither [something constituted] in matter nor something that is found with respect to a certain disposition, but rather are existence as
m356v such, these [principles] must be an object of consideration in a general discipline which takes into consideration being[d] in an absolute manner.

Furthermore, there are general things shared by sensible [material] and nonsensible [immaterial] things such as oneness, multiplicity, po-
a3 tency, actuality and other general concomitants, and, in general, things which adhere to sensible things with respect to the fact that they are
q7 existents (this respect is peculiar to the things separated [from matter],

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a After *'Demonstration'* ms. *M* adds *wa-l-amru fīhi ẓāhirun* ('and the issue is evident'), I. Mantino adds *& est notum*.

b Lit. 'into those three kinds'.

c Omitting *ayḍan* after *bayyinun* ('also clear') as in ms. *G* and I. Mantino. The other manuscripts have *ayḍan* here due to a misplaced insertion of a marginal note in which the omission of another *ayḍan*, seven words later (after *al-naẓaru*), was corrected. This second (and correct) *ayḍan* having been omitted at an early stage of the transmission is absent in mss. *H, M*, and I. Mantino.

d *Al-wujūd* in all mss. except *M* and *P* which read *al-mawjūd* ('the existent').

as we shall show below). No other discipline can take into consideration things of this kind except the discipline whose subject matter is being[a] as such.

Now, if this is the case, while it has [already] appeared that the theoretical sciences are [divided into] two parts, departmental and universal, the departmental ones having been dealt with in the preceding [treatises], that which remains to be dealt with is consequently this science. It aims, as has been shown, at considering [(i)] being inasmuch as it is being, [(ii)] all its species up to [that point] where it reaches the j31
subject matters of the departmental sciences, [(iii)] the essential concomitants of [being *qua* being], and [(iv)] at the completion[b] of all this [by considering] the first causes of [being *qua* being], i.e. the things separated [from matter]. This is why this science states only the formal and the final causes, and, in a specific respect, the efficient cause, that is to say, not in the respect in which the efficient cause is predicated of changeable things, since it is here [in metaphysics] not subject to the condition of being temporally prior to its effect as is the case [with efficient causes] in natural things [8]. Whenever causes are stated in physics, this is stated only with respect to nature and natural things. Correspondingly, the causes of the existents [*qua* existents] whose statement is sought here [in metaphysics], are stated only with respect to the divinity and the divine things[c].

In short, it is [Aristotle's] basic aim in this science to state that which remains [to be stated] scientifically with respect to the knowledge of the most remote causes of sensible things [9], because that which has been shown in this respect in physics are only two remote causes, a4
namely the material and the moving [causes]. What remains to be q8
shown here [in metaphysics] are their formal and final causes, and [also] the agent. For [Aristotle] thinks that that which moves is distinct from the agent inasmuch as that which moves gives to the movable

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a *Al-mawjūd* in all mss. except *M* which reads *al-wujūd* ('existence').

b Reading *tawfiya* with almost all manuscripts instead of *tarqiya* ('raising', 'improving') attested by ms. *M* only and adopted by Quirós and Amīn.

c Reading *min jihat al-ilāhi wa-l-ashyāʾi l-ilāhiyya*, as in almost all mss., instead of *min jihat al-ālati wa-l-ashyāʾi l-ilāhiyya* (ms. *H*) or *min jihat al-ālati wa-l-ashyāʾi l-āliyya* (ed. Jihāmī); cf. also *Long Commentary on the Metaphysics*, p. 154, l. 14sq., p. 707, l. 4sqq., p. 1421–1426.

only [its] motion, whereas the agent gives the form through which the motion [occurs]. This knowledge is peculiar to this science because it is through general things that one apprehends the existence of these causes; and this still [holds true] when we take for granted here what became plain in physics: that there is an immaterial [first] mover [10].

As for the material cause and the most remote moving cause, premises which facilitate their determination appeared there, I mean in physics. What is more, a specific demonstration [11] of the two [causes] is possible in no other [science], especially [in the case of] the moving
j32 cause. (The demonstrations employed by Ibn Sīnā in this science [of metaphysics] in order to show [the existence] of the first principle are, on the other hand, altogether dialectical and untrue propositions, which do not state anything in an appropriate manner [12], as can be seen from the counter-arguments set forth by Abū Ḥāmid [al-Ghazālī] against these [propositions] in his book on *The Incoherence [of the Philosophers]*). Therefore, he who practises this science [of metaphysics] takes for granted the existence of the [first mover] from physics, as said before, and states [only] the mode in which it is the moving [cause], just as he takes for granted the number of the [celestial] movers[a] from the discipline of mathematical astronomy. What has become plain in physics with respect to the existence of separate principles is not superfluous in this science [of metaphysics], as Ibn Sīnā maintains, but rather necessary, because it is employed in this science as a supposition [13] and as such forms part of its presuppositions [14].

a5 m357r From what has been said so far, the aim and the presuppositions of this science have become clear. As for its parts, we find this [science]
q9 unfolded[b] in the [single] treatises [of the *Metaphysics*] attributed to Aristotle [15]. However, it can be reduced to three [major] parts [as follows].

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a Reading *ʿadada l-muḥarrikīna* with the Hebrew tradition and Mantino's translation ("numerum motorum"). Most of the Arabic mss. have *wujūda ʿadadi l-muḥarrikīna* ('the existence of the number of the [celestial] movers') or *ʿadada wujūdi l-muḥarrikīna* ('the number of the existence of the [celestial] movers'), presumably due to an erroneous interpolation of the variant reading *wujūd* instead of *ʿadad*. Cf. also the almost identical phrasing in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1653, l. 12–14.

b *Najiduhū muntashiran* in all Arabic mss., as opposed to "inueniuntur (*scil.* partes ipsius) disseminatae" in I. Mantino.

In the first part [Aristotle] takes into consideration sensible things inasmuch as they are existents, all their genera which form the ten categories, and all their concomitants which adhere to them, and relates [all] this to what is first in them, as far as this is possible in this part [of metaphysics].

In the second part he takes into consideration the principles of substance—these are the separate things—, explains their mode of existence, relates them likewise to their first principle, which is God (exalted is He), explains His specific attributes and acts, and shows also the relationship between Him and the remaining existents and [the fact] that He is the utmost perfection, the first form, and the first agent, until [he finally comes to] other things, [both those] which are specific to each of the separate things, and [those which] are common to more than one of them [16].

In the third part he takes into consideration the subject matters of the j33
departmental sciences [17] and eliminates the mistakes committed by the ancients on this [subject], namely in the discipline of logic and in the two departmental disciplines, that is physics and mathematics. The reason for [proceeding in] this way is that it is inappropriate for the departmental sciences to establish the truth of their principles and to eliminate errors occuring about them (as is shown in the *Book of Demonstration* [18]). This is rather the task of a general discipline, that is either this discipline [of metaphysics] or the discipline of dialectic. However, the discipline of dialectic reduces such opinions to absurdity merely through generally accepted statements for which there is no a6
guarantee that they do not contain any falsehood, whereas this discipline [of metaphysics does so] through true statements, even if they might accidentally serve as generally accepted [statements]. Accordingly, the verification of the principles of the departmental disciplines is not a necessary part of this science [19].

From this it is clear that only the first two parts of this science are q10
necessary parts [of it], whereas the third part [is included] for the purpose of improving [the acquisition of the other sciences] [20], since the existence of most of the subject matters of the departmental sciences and their mode of existence belong to what is self-evident, and only the ancients who preceded [Aristotle] lapsed into mistakes in this [matter]. On the basis of a complete knowledge of these [things], however, these aporiai could be solved the way uncertainty occurring in anything is resolved, through completing one's knowledge of this [thing] together with acquiring knowledge of its substance [21].

Nevertheless, we decided to arrange the present book in five chapters. In Chapter One we present the introduction[a], which we are now in the midst of, and explain the terms employed in this discipline [of metaphysics] [22]. In Chapter Two we set forth the things which serve as species for what belongs to the first part of this discipline. In Chapter
j34 Three we set forth the general concomitants of these [things], while the Fourth [Chapter][b] contains a lecture on what the second part of this science includes. Chapter Five comprises what the third part of this discipline contains [23].

The benefit of this science is of the same kind as that of [the other] theoretical sciences. This has already become clear in the book *On the Soul* where it has been stated that their aim consists in perfecting the rational soul to such an extent that man achieves its utmost perfection [24]. However, although the benefit of this science is of the same kind as that of [the other] theoretical sciences, it occupies the highest rank among them in this [respect], because this science is related to the other theoretical sciences as an end and completion. For through the knowledge of this [science] one acquires knowledge of the beings in connec-
a7 q11 tion with their most remote causes, which is what human cognition is striving for. Furthermore, it is through this science [of metaphysics] that the departmental sciences achieve their completion, since it is [metaphysics] which verifies their principles and eliminates errors occuring about them, as expounded [above].

m357v As for the position of this [science] in [the course of] education, it [comes] after physics because it uses as a supposition what this science proves about the existence of immaterial potencies[c], as said [before] [25]. Apparently, it is only due to its position in [the course of] education that this science [of metaphysics] is called the science which [comes] after physics, but except for that, it is prior in being and therefore called first philosophy.

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a Pace Van den Bergh, p. 275, the Cairo manuscript reads, as all other manuscripts, *al-ṣadr*.

b *Al-maqāla* is omitted in the oldest manuscripts (Madrid and Cairo) as well as in the Hebrew tradition and most later manuscripts.

c All manuscripts have *quwan*, not 'forms' as translated by Quirós (p. 15) and Van den Bergh (p. 6).

[So far] our discourse has explained the aim of this science, its parts, its benefit, its relation and rank [with respect to the other sciences], as well as the meaning of its name. As for the teaching methods employed in this [science], they are the same as those employed in the other sciences. Furthermore, as far as the kinds of proofs employed in this [science] are concerned, these are for the most part proofs [of the exist- j35
ence of something] [26], as we always proceed in this [science] from things better known to us to things better known by nature. However, as said [before], the main contents of this science are either evident or close to self-evident things, or things that have been shown in physics.

Having explained all that we initially intended [to show], we shall a8
soon proceed to a detailed discourse on what belongs to the first part of this science, after we have specified in how many ways the terms which signify the objects of this science and the parts of its objects are predicated, in order to be well prepared for the study of each thing searched for in this [science]. We say:

[1] 'Being' is predicated in [various] ways. Firstly, [it is predicated] of each of the ten categories and, thus, belongs to the kinds of names[a] q12
which are predicated by order and analogy [27], not to those which are predicated[b] by pure equivocation or univocally. Secondly, it is predicated of that which is true, that is [if] that which is in the mind is in correspondence with that which is outside the mind, as in statements on whether nature exists or on whether the void does not exist [28]. Furthermore, ['being'] is predicated of the quiddity of all that has a quiddity or essence outside the soul, no matter whether this essence is conceptualized or not. Thus, it applies to the ten categories that both of these two meanings of the term 'being' are predicated of them, the one inasmuch as they have an essence outside the soul, the other inasmuch as they signify the quiddities of these [extramental] essences. Accord- a9
ingly, the term 'being' can be reduced to precisely the following two meanings: that which is true, and that which exists outside the soul,

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a Reading with most of the manuscripts (and I. Mantino) *wa-huwa min anwāʿ al-asmāʾ* instead of *wa-huwa/hiya anwāʿ al-asmāʾ* ('and these are the kinds of names'), as edited by Quirós and Jihāmī.

b Reading with the oldest Arabic manuscripts (and I. Mantino) *allatī tuqālu* instead of *alladhī yuqālu* transmitted in some younger manuscripts and edited by Jihāmī.

where the latter is again [divided] into two groups, either species or forms, I mean the forms and quiddities of species[a].

Accidental being cannot be conceptualized as a separately existing [thing] [29], since the essence or quiddity of a thing cannot be an accident. Rather [accidental being] can only be conceptualized in connection with the relation between one existent and another existent. For if we relate one existent to another and this relation requires that one of the two [existents] is part of the quiddity of the other[b], as with the existence of the centre with respect to the circle or of the equality of
j36 two right angles with respect to [the sum of] the angles of a triangle, or [if it requires] that either of the two [existents] is part of the quiddity of the other, as with father and son, [then] we say of both of the two [existents] that they are essential existents. But if it does not pertain to the quiddity of at least one of the two to exist [as] belonging to the other[c], [then] it is said that this [exists] accidentally, as when we say 'the architect is playing oud', or 'the physician is white'. The word 'being' may [also] signify the relation by which the predicate is con-
q13 nected with the subject in the mind, as well as the words signifying such a relation, no matter whether this connecting link is affirmative or negative, true or false, essential or accidental.

Now, these are the most prominent meanings by which the term 'being' is predicated in philosophy, [where] it belongs to the terms transferred [into technical terminology] [30]. The meaning it has in [the language of] the masses is different from what it signifies here [in philosophy], as it signifies among the masses merely a certain [accidental] disposition, as when one says that a stray animal 'has been
m358r found' [31]. In short, among them it signifies something in a substrate [the meaning of] which is not quite clear. Therefore, some of them thought that [the term] signifies not the essence of a thing, but rather an
a10 accident in it, because it is [used] in [the language of] the masses [like] derived [forms of] words [32]. There is no need to take this [meaning further] into account, rather what has to be understood by this [term]

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a *Wa-dhālika ayḍan ilā qismayn immā ilā l-anwāʿ wa-immā ilā l-ṣuwar aʿnī ṣuwar al-anwāʿ wa-māhiyyātihā*, transmitted in all manuscripts except ms. *H*, is partly or entirely secluded in Van den Bergh (p. 7) and Amīn.

b Reading *fī māhiyyat al-thānī* with mss. *H* and *M* (cf. "de quiditate alterius," I. Mantino, fol. 357vb).

c All manuscripts read *li-l-ākhar*, not *al-ākhar* as edited by Quirós and Amīn.

here, when we are using it in order to signify the essence, is the same as that which is understood by saying 'thing' and 'essence', and in general as that which is understood by terms which are root morphemes [33]. Therefore, we find some of them maintaining that the term 'being' as applied to[a] what is true is the same as ['being'] as applied to the essence; and it is for the same reason that some thought that [being] is an accident, arguing that if the word 'being' signified the essence, it would be self-contradictory to say that there is a [certain] being in the substance[b]. They failed to notice that 'being' in the present [statement] has a meaning different from that propounded above [34].

Furthermore, if ['being'] signifies an accident in a thing, as stated repeatedly by Ibn Sīnā, one of the [following] two cases must apply to it: this accident is either one of the second intentions or one of the first intentions. If it is one of the first intentions, it is necessarily one of the nine [accidental] categories, and [consequently] the term 'being' cannot apply to the substance and[c] the remaining categories of the accident, unless this [mode of] predication is somehow accidental to [all of] them j37 q14
or there is one genus of accidents common to [all] ten categories. But all this is absurd and unacceptable. According to this [doctrine], if one were asked what each of the ten categories contains, it would be incorrect to answer ["being"] [35], but all this is self-evident.

On the other hand, if it is [conceived as] one of the second intentions (that is, intentions which exist only in the mind), nothing prevents us from [holding] this [doctrine of the accidentality of being], for this meaning is one of [the ones] we enumerated, to which the term 'being' applies, namely that which is synonymous with the true. However, this meaning and the meaning by which this [term] signifies the essences a11
individually are entirely distinct. All this becomes clear upon a moment

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a Reading, with mss. *Q, D, T* and I. Mantino, *al-munṭaliq ʿalā* instead of *al-muṭlaq ʿalā* as transmitted in the remaining mss. and adopted by Quirós. For Ibn Rushd's use of *inṭalaqa* c. *ʿalā* cf. his *Long Commentary on the Metaphysics*, p. 270, l. 13.

b Reading *innahū fī l-jawhari mawjūdun* instead of *fī l-jawhari innahū mawjūdun*; cf. note 34.

c Reading, with mss. *A, D, G, H,* and *T, wa-ʿalā* instead of *wa-lā ʿalā* ('nor on') transmitted in the remaining mss. and adopted in the editions by Quirós (but not[!] in Quirós' translation ["no podría aplicarse la palabra *ser* a la substancia y a los restantes predicamentos accidentales"], p. 20sq.) and Amīn.

in reflection, but this is the case with many things presented by this man as being [original inventions] by himself.

j38 **[2]** 'Entity' [36] is predicated synonymously of the same thing to which the term 'being' applies with the exception of veridical being. It likewise belongs to the words transferred [into technical terminology] [37], since it [serves] in [the language of] the masses as a particle, but here [in metaphysics] as a noun. Accordingly, one attaches to it the prefix which is characteristic of nouns, namely the [definite article] *'al-'*, and derives from it an abstract noun which [expresses] the act or the form from which the act originates[a], and says 'entity' [derived] from '*ens*' similar to the derived forms 'humanity' from 'human [being]' and 'manhood' from 'man'. Some translators [from the Greek] used this [terminology] because they found this [term] less misleading than the term 'being' due to [the fact] that it has the form of a derived noun [38].

[3] 'Substance' is predicated first and primarily of the concrete [thing] which is not in a substrate and in no way [predicated] of the substrate [39]. Secondly, it is predicated of all universal predicates
q15 formed by a genus, species, or differentia, which make known the quiddity of a concrete [thing]. Thirdly, it is predicated of all that is signified by the definition, i.e., either that which makes known the quiddity of a substance or in general that which makes known the quiddity of a certain thing[b], no matter to which of the ten categories this thing belongs (this is why definitions are said to make known the quiddities of things). This [third meaning] is called 'substance' in a relational sense only, not absolutely.

j39 Having said that 'substance' means primarily the concrete [thing] which is not in a substrate and not [predicated] of the substrate [40], the
m358v philosophasters, despite[c] accepting this [meaning of] 'substance' unanimously [41], held that that which makes known the quiddity of this concrete [thing] is more appropriately called 'substance'. Therefore, he
a12 who maintains that it is the universals of the concrete thing that make known its quiddity, maintains that they deserve most properly [to be

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a *Alladhī huwa l-fiʿlu awi l-ṣūratu llatī yaṣduru ʿanhā l-fiʿl* in all manuscripts except *H*, secluded by Amīn, Horten and Van den Bergh.

b Following the wording of mss. *H, M*, and I. Mantino, adopted by Quirós, but not by Amīn and Jihāmī.

c Reading *wa-in* instead of *idh* ('since'); cf. note 41.

called by] the term 'substance', while he who maintains that it is the corporeal that makes known the quiddity of this concrete [thing] and that this [quiddity] is constituted solely by length, breadth and depth, calls these dimensions 'substance'. Similarly, he who maintains that the concrete essence is composed of indivisible parts, calls these [atoms] 'substance', as is among our contemporaries the case with the theologians who call the indivisible part 'individual substance'. Likewise, for him who maintains that the concrete [thing] is composed of matter and form, it is form and matter that deserve most properly [to be called by] the term 'substance'; and this [position], in turn, [is held] in connection with [various] opinions about the matter of each single thing or its form.

The only thing they all agreed upon is this statement [I mentioned above], namely that the term 'substance' [is predicated] more properly of that which makes known the quiddity of the concrete [thing] than of the concrete [thing itself], as it was [conceived] as unacceptable and impossible that the principles and elements of the substance should not [themselves] be substance, since that which is the cause of another q16
thing deserves most appropriately [the name of] that whose cause it is. E.g., the term 'heat' is most properly [predicated of] the thing which is by itself the cause of hot things [42]. Therefore, none of those [philosophasters] supposed the accident *qua* accident to be part of the substance, but [this only] inasmuch as it is conceived as making known the essence of the concrete substance, as for instance those who took the dimensions as substance. If this is indeed the case [43], and if it is clear that there is a separate existent which is the cause of the existence of this concrete substance, [then] this [separate existent] deserves most properly [to be called by] the term 'substance'. For this reason, Aristotle called the separate intellects substances.

[As employed] among the philosophasters this term is also trans- a13
ferred [into technical terminology] from the [homonym] *'jawhar'* in colloquial speech, which means 'expensive stone'. The *tertium comparationis* between the two terms consists apparently [in the fact] that j40
these [precious stones] are called *'jawhar'* among [the masses] due to their high rank and value with respect to other things one can purchase, while the category 'substance' is the highest among the categories, and therefore called *'jawhar'*.

[4] 'Accident' is predicated of that which does not make known the quiddity of the concrete [thing] which is not in a substrate. It falls into two classes, one which does not make known the essence of [whatever] thing (this is [the accident] *qua* individual), and a second which makes known the quiddity of the individual [accident] (this is [the accident] *qua* universal) [44]. The term 'accident' is transferred [into technical terminology] from that which is signified by its homonym in [the language of] the masses, i.e. that which is ephemeral. In general, it is divided into the following nine categories: quantity, quality, relation, where, when, position, having, doing, and being-affected (the meaning of these words has been explained in the book [entitled] *Categories*).

'Quantity' is predicated of all that is measurable by a part of it. Primarily [and] properly it is predicated of number, then [also] of the other genera mentioned in that book [45]. There are essential as well as
q17 accidental quantities. Essential [quantities] are like number and the other species mentioned [in the *Categories*], accidental [quantities] are like black and white, since they are measurable inasmuch as they [occur] in a spatial extension. Essential [quantities] can occur in a thing primarily, like the measurability of number or spatial extension, and
m359r they can occur secondarily and by means of something else, like time which is reckoned among quantities solely due to [its connection with] motion, and motion [in turn] due to [its connection with] spatial exten-
a14 sion. In a yet more extended [sense] heavy and light are included among quantities, since they are qualities and measurable only inasmuch as they [occur] in things with spatial extension. Almost the same applies also to other qualities which [occur] in things with spatial extension such as the large, the small [46], the narrow, the wide, and the deep. Although these are similar to qualities, they are nevertheless reckoned among the quantities because they are existents which occur primarily in things with spatial extension.

j41 'Quality' might be predicated of more [things] than those of which it is predicated in the *Categories*, for it is predicated of the four genera mentioned there [47], but also of the forms of the species such as humanity and animality. There are [qualities] which occur in a substance essentially, such as disposition and state, and others which occur by means of another category such as shape, which occurs in a substance by means of a quantity [48].

'Relation' applies to all ten categories, for it occurs in substances, such as being-father and being-son and the like, and [it occurs] in the quantity, such as the double, the half, and the equal, and in quality, such as that which is similar, knowledge, and the knowable, and in the [category of] where, such as to-be-in-a-place and place, and in the [category of] when, such as prior and posterior, and in the [category of] position, such as right and left, and in [the categories of] doing and being-affected, such as agent and being-acted-upon [49].

The difference between these [latter] five categories, which are constituted by a correlation, and relation [proper], which occurs in correlations, [consists in the fact] that the correlation which is conceived as relation [proper] is a correlation between two things the predication of each of whose quiddities alludes to the other, as in being-father and being-son, whereas [in] the correlation which is conceived as [pertaining] to the where, the when, and the remaining other [categories], only the quiddity of one of the two [correlatives] is predicated of the other[a] [50]. The where, for example, [expresses] a correlation of body with respect to place, as mentioned [above], where 'body' is conceived as a necessary part of the definition of place, while the definition of body does not necessarily include 'place'. Accordingly, [body] is not a relative [proper]. But if [body] is conceived inasmuch as it is that-which-is-in-a-place, then a relation is attached to it, and this category [of the where] falls in a way under the category of relation. The same holds true of the other correlative categories. q18 a15

In general, the category 'relation' is either attached to the relative essentially, not by means of something else, such as being-son and being-father, right and left, or it is attached to something by means of another category as [in the case of] agent and being-acted-upon, to which 'relation' is attached by means of the categories 'doing' and 'being-affected'. [Furthermore], the concomitants of the other categories[b] such as opposition, contrariety, privation and having might apply to j42

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a Reading, with ms. *H* and I. Mantino, *tuqālu māhiyyatu aḥadihimā....* The remaining mss. have *yuqālu aḥaduhumā...* ('only one of the two [correlatives] is predicated...') except ms. *M* which reads *tuqālu l-nisbatu baynahumā min ṭarafi wāḥid †...†iyya aḥaduhum...* (partly illegible after *wāḥid*, adopted and modified by Quirós, p. 18, l. 6sq., and Amīn, p. 15, l. 1sq.).

b Reading *lawāḥiqu sā'iri l-maqūlāt* instead of *sā'iru lawāḥiqi l-maqūlāt* ('the other concomitants of the categories'), as none of these concomitants has been

relation [as well]. In general, it can belong to first intentions as well as to second intentions [51], as [in the case of] the relation between genus and species.

[5] 'Essence' is predicated absolutely of the concrete [thing] which is not in a substrate and not [predicated] of the substrate, i.e. [of] the individual substance. Furthermore, it is predicated of whatever makes known the substance of this concrete [thing], that is, the universals of the substances. Then it is also predicated of the concrete [thing] which
q19 is in a substrate, that is, [of] the individual accident, as well as of whatever makes known the quiddity of this [individual accident], that is, the nine [accidental] categories and their species.

Due to [the fact] that this word is predicated primarily of the concrete [thing] which is not in a substrate, it is applies most appropriately to[a] that which is neither in a substrate nor [itself] a substrate to whatever
a16 thing, provided the existence of such a thing is proved. The [term] 'essence-of-something', where ['essence'] is used as governing [an-
m359v other substantive], means only the quiddity of that [other thing] or a part of its quiddity [52].

'Essentially' is predicated in [various] ways [53], one of which consists in its predication of the concrete [thing] which is not in a substrate, that is, [of] the individual substance. Another consists in its predication of whatever makes known the What of this [substance]. In general, [it is predicated] of whatever 'substance' is predicated of absolutely. That which is essentially can be predicated accidentally of a [certain] opposite, as explained in detail in the *Book of Demonstration* [54]. It has been explained there that this [55] occurs in categorical propositions in the [following] two ways: [(i)] the predicate is [included] in the substance of the subject of predication, such as 'rationality' being part of the substance of man; and [(ii)] the subject of predication is [included] in the substance of the predicate, as with the equality of [the sum of] a triangle's angles with two right angles [56]. Furthermore, that which is essentially is predicated in [the form of] predicates which exist in a primary mode of existence in their subjects of predication, for instance the existence of colour in the surface and of life in the soul [57], for

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treated so far. For the term 'concomitants of the categories' cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 4, l. 4sq.

a *Yanṭaliqa ʿalā* in all manuscripts, not *yuṭlaqa ʿalā* as edited by Jihāmī.

colour exists in body by means of the surface and life [exists] in the body [of living beings] by means of the soul. This is one of the meanings referred to by the term 'primary predicate' in demonstrative propositions [58]. [Finally], that which is essentially is also predicated of the existent which has no cause prior to itself, no matter whether efficient, formal, material or final [cause]. This is the first mover, according to what has appeared in physics and shall come up below. j43

[6] As for the word 'thing'[a], this is predicated of whatever the word 'being' is predicated of. It can also be predicated in a sense wider than that predicated by the word 'being', that is, [of] all things conceptualized in the soul, whether or not there is such a thing outside the soul (such as the goat-stag and the sphinx [59]). In this respect, it is true to say 'this thing is either an existent or a non-existent'. In the latter case, the term 'thing' applies to [that which is stated in] untrue propositions, whereas the term 'being' does not apply to this [60]. q20 a17

[7] 'One' is predicated in one of the ways [we use] terms predicated with reference to one thing [61]. The primary [way] to predicate ['one'] in this [sense] is the numerical 'one' [62], the commonest [use] of which [applies] to the continuous, as in speaking of one line, one surface, or one body. What is even more appropriate among these [modes of predication] to be called 'one' is that which is perfect, i.e. that which does not accept any addition or subtraction, such as the circular line and the spherical body [63]. The continuous can be continuous by imagination[b] [64], like line and surface, or it can be continuous by something in it, as in the case of homeomeric bodies (in this [meaning] we call a concrete [mass of] water 'one') [65]. We also predicate 'one' of that which is connected and contiguous[c] (this is that which has one motion) [66], and even more so of that which is connected by nature (these are

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a Most manuscripts display a separate subheading, *«Al-Shay'»* ('Thing'), for this section. I assume that such a subheading has been added by a copyist because the section does not begin, as the preceding and most of the following sections, with the term which forms its topic. The subheading is omitted in ms. *G* and in I. Mantino.

b Reading with ms. *H 'bi-l-wahm'*; cf. note 64.

c Reading, with mss. *H, M*, and *Q*, *al-murtabiṭatin al-mutamāssatin* instead of *al-murattabatin al-mutamāssatin* ('that which is ordered and contiguous') of the remaining manuscripts.

things grown into one, such as one hand, one leg), and of these [especially] those which have only one motion [67]. In another way, ['one'] j44 is predicated of that which is connected by art, such as one chair, one cupboard [68]. Furthermore, 'one' is predicated of individuals which are one by form, such as Zayd and ʿAmr[a] [69].

Now, these are the commonest meanings of predication of the numerical one. [In the language of] the masses, 'one' generally signifies q21 such things only inasmuch as they are isolated [70] from other things and set apart by their essence[b] [71] and inasmuch as they are indivisible. [This is so] because these are precisely [the things] one conceptualizes a18 straightaway, from [considering] the meaning of 'oneness' and 'one'. Thus, when defining numerical oneness, one says it is that by which each thing is said to be one. Some of these things are isolated by the places which encompass them (this is the commonest meaning of being-isolated), others are isolated by their limits only (this [applies to] the contiguous), again others are those which are isolated only by imagination (this is how number is attached[c] to what is continuous).

If this is the case, the numerical one in these things signifies with respect to them only [those] things which are extrinsic to their essence, in short, [it signifies] accidents attached to them in [our] apprehension and in the mind.

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a 'Furthermore ... ʿAmr' *(wa-qad ... ʿAmr)* is omitted in ms. *H* (and in the translations by Horten and Van den Bergh), and transposed after the next sentence in ms. *M* (cf. ed. Quirós, p. 20), obviously due to a misplaced insertion of a marginal addition of the omitted clause. All other mss. including I. Mantino transmit this sentence correctly at the present place.

b From here on up to p. 38, l. 1 ('While the masses do not know any further meaning of 'one') of the translation, the text as transmitted in the manuscripts is heavily confused through misplaced interpolations of omitted sections, a number of doublets as well as sentences starting or breaking off right in the middle (the section in question concerns p. 21, l. 2–22, Quirós, p. 17, l. 14 – p. 18, l. 9, Amīn, p. 44, l. 5 – p. 45, l. 6, Jihāmī). The reason for this confusion lies presumably in the fact that one passage of this section has been transmitted in two versions (printed here in two columns), in all likelihood due to a revision by Ibn Rushd himself. The reconstructed Arabic text on which the translation is based, can be found in note 71.

c Reading, with Quirós, *yalḥaqu* instead of *talḥaqu* edited by Amīn and Jihāmī. The prefix is undotted in most mss.

This then is how the intellect abstracts the meaning of the indivisible one, which is the principle of number. For the intellect does not apprehend a certain thing as being indivisible with respect to this or that disposition, unless it apprehends in it the meaning of 'indivisible' as such. Likewise, it does not apprehend that something is discrete with respect to something else, unless it has previously apm360r prehended [the meaning of] being discrete. When the intellect then uses [the concept of] the absolute one[a] repeatedly, [the concept] of the discrete quantity as such emerges (this is number), and, as a consequence, it attaches a number to whatever it counts by means of [the concept of] number as such.

This then is how [the concept] 'one', which is the principle of number, emerges in the mind, for when the intellect abstracts from [the apprehension of] these individuals this meaning which cannot be split up[b] into two or more individuals, this will be the 'one' which is the principle of number. When the j45 intellect then uses [this concept] repeatedly, the [concept of] number emerges.

This is how number falls among the ten categories under the genus of quantity. One is the principle of [number], because number is nothing else than the set of units to which this description applies, and it is a measure, because it is through the one that number is measured, and it is due to [the one] that measurability is attached to the things in which there is something first by nature[c], I mean that which is not [further] divisible[d] within this [genus], such as the first in the genus of qualities and [in] the genus of measurable things [72].

a Reading with ms. *G* and I. Mantino *al-wāḥid al-muṭlaq* instead of *al-wāḥid al-muṇṭaliq* in the remaining manuscripts.

b Reading with I. Mantino *al-ghayr munqasim* instead of *al-ghayr munfaṣil* which is syntactically impossible.

c Reading, with the majority of the manuscripts, *awwalun bi-l-ṭabʿ* instead of *awwalan wa-bi-l-ṭabʿ* in ms. *M* and I. Mantino (adopted by Quirós). This lectio difficilior is confirmed by the *Long Commentary on the Metaphysics*, p. 1267, l. 5–7.

d Reading with I. Mantino *al-ghayru l-munqasim* instead of *al-ghayru l-munfaṣil* (which would be in contradiction to the entire preceding section; cf. also *Long Commentary on the Metaphysics*, p. 1267, l. 6).

While the masses do not know any further meaning of 'one', it is employed in this discipline [of metaphysics also] as a synonym of the thing's essence and quiddity[a] [73]. [Predicated] in this way, the numer-
q22 ical one might signify the individual which does not admit of division in so far as it is an individual, as when we say 'one man', 'one horse'.
a19 In a similar way, we predicate 'one' of that which is compounded of a multiplicity of things, such as oxymel which is composed of vinegar and honey. This meaning of 'one' is different from the one we predicate of the continuous, since the continuous is by its nature not divisible into a definite number of parts, as is the case[b] with oxymel [74].

Furthermore, isolating continuous magnitudes is something extrinsic to the substance of that [which is continuous], whereas this is not the case with isolating an ingredient from that which is compounded from it. In addition, this kind [of predication] does not apply to that which is combined from more than one thing, for the parts of that which is combined are actually existent in the combined, which is not the case with the parts of oxymel in the oxymel. It is thus clear that 'one' in this sense (when it means one *qua* individual) signifies only the isolation of the concrete individual in terms of its essence and quiddity, not the isolation of something extrinsic to its essence. An example [of the latter is] when we say of this concrete [mass of] water that it is numerically one, since in a case like this the isolation is no more than something accidental to the water, which is why the water remains the same no matter whether isolated or not isolated. [This is] in correspondence with the common characteristic of accidents to occur successively at a substrate without [entailing] its substantial change.

j46 From this Ibn Sīnā [derived] his opinion that[c] the numerical one signifies only an accident in the substance or in anything else that is

a Reading *murādifan li-dhāti l-shayʾi wa-māhiyyatihī*. Mss. *H* and *Q* have *murādifan li-dhāti l-shayʾi wa-māhiyyatihī li-l-mawjūdi* which makes no sense. The remaining mss. omit *li-dhāti l-shayʾi wa-māhiyyatihī* and have only *li-l-mawjūd* ('[as a synonym] of being'), cf. note 73.

b Reading with, ms. *Q* and I. Mantino, *ka-l-ḥāl* instead of *ka-l-khall* ('as vinegar') in the remaining mss.

c For the next eight lines (up to 'the category of quantity') the translation follows the edition by Quirós (p. 22, l. 20 – p. 23, l. 2) which gives the text of ms. *M* (which in most points is confirmed by I. Mantino, fol. 360rb-va). All other mss. display a very confused text (as also the editions by Amīn and Jihāmī).

isolated, and that it cannot signify the substance of a thing, that is, an isolation which is not additional to the concept of the substance. In support of this he maintains that if one conceded that the numerical one signifies an isolation which is an accident in an accident or a substance in a substance, number would be composed of accidents and substances, and it would not fall under a single category, not even under the category of quantity, which is absurd [75]. He says: Furthermore, if we suppose that [the numerical one] signifies the substance only, this would entail another absurd consequence, namely that substances would inhere in accidents. Otherwise, how could we say of the concrete accident that it is numerically one [76]? m360v q23 a20

[Ibn Sīnā] errs here in so far as[a] in his [doctrine] the accidental which is attached to a thing in the intellect is confounded with the accidental which is attached to it in [extramental] existence, and [because] he was convinced that 'one' is predicated of all ten genera univocally, not *secundum prius et posterius*, and that it is [identical with] the numerical one with respect to what he conceived as its meaning in everyday language. Therefore, he thought that being isolated and one are accidents in all things that can be isolated[b]. We will clarify this further in our discourse on the one and the many [77].

Furthermore, the numerical one is predicated in this discipline of separate substances. Generally speaking, these are the most appropriate [subjects] of which the numerical one is predicated, because they are divisible neither by quality (as with the divisibility of the concrete [thing] into matter and form) nor by quantity (as with the divisibility of the continuous). Finally, this kind of numerical one is clearly similar in one way to the individual one, in another way to what is one in species. It is similar to the individual inasmuch as it is predicated neither of many [things] nor in any way of the substrate. It is, on the other hand, similar to [the 'one'] in species inasmuch as it is one essentially intelligible concept[c] [78]. These, now, are all the ways the numerical one is predicated. j47

a The following five lines (from 'in so far as' up to 'the numerical one') are omitted through homoioteleuton in mss. *H* and *M*, hence also in the translations by Quirós, Horten and Van den Bergh. For the Arabic text cf. Jihāmī, p. 46, l. 14–18, Amīn, p. 20, note 2.

b The last sentence is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

c Reading, with the majority of the manuscripts and I. Mantino, *maʿnan wāḥidun maʿqūlun bi-dhātihī* (Amīn follows ms. *H*, Jihāmī follows ms. *A*).

‘One’ is predicated of that which is numerically multiple[a] in five ways: Firstly, ‘one’ in species, as when we say ‘Zayd and ʿAmr are one in humanity’. Secondly, ‘one’ in genus, as when we say about the individual man and horse that they are one by being living beings. (The
a21 q24 genus can be either proximate or remote [genus]. Whatever is one in species, is also one in genus, but not vice versa. Closely related to the one in genus is the one in matter.) Thirdly, ‘one’ in substrate, but many in definition, such as that which has increased or is diminishing[b] [79]. Fourthly, ‘one’ by relation, as when we say that the relationship between ship and captain and between king and city-state is one relationship. Fifthly, ‘one’ by accident, as when we say that snow and camphor are one in whiteness. Now, these are all meanings in which ‘one’ is predicated essentially [80].

‘One’ is also predicated accidentally in opposition to what [it means] essentially, as when we say ‘the physician and the architect are one and the same’, if it happens that a certain architect is [also] a physician. This [kind of oneness] is conceptualized only in combined concepts [81]. In simple [concepts], it does not [occur], since the essence of the concrete thing does not happen [to be one] by accident.

Now that it has become clear in how many ways [the term] ‘one’ is employed in this discipline, it is [also] obvious that it is here coextensive with [the term] ‘being’, and that in this discipline[c] there is no difference between searching for the first existent in each single genus of existents (and especially in the genus of substance) and searching for the first one in each single genus [82], except that that which applies to the principle [of each genus] *qua* one is different from that which
j48 m361r applies to it *qua* existent [83]. Accordingly, the term ‘one’ is predicated

a Reading, with mss. *H, P*, and I. Mantino, *yuqālu l-wāḥidu ʿalā l-kathīrīn bi-l-ʿadad*. In ms. *M* we read *yuqālu l-wāḥidu ʿalā l-wāḥidi bi-l-ṣūra* (‘‘One’ is predicated of the one by form’); similarly in mss. *D* and *R yuqālu l-wāḥidu ʿalā l-wāḥidi wa-l-ṣūra* (‘‘One’ is predicated of one and form’). Mss. *A G T* have *yuqālu l-wāḥidu wa-l-ṣūra* (‘‘One’ and form are predicated’).

b Reading *ka-l-nāmī wa-l-nāqiṣ* with mss. *H, M* and *Q*; the remaining mss. (including I. Mantino) have *ka-l-tāmmi wa-l-nāqiṣ* (‘as the perfect and the deficient’), adopted by Jihāmī; Amīn’s edition presents a hybrid version; cf. note 79.

c The Arabic text corresponding to ‘and that in this discipline’ up to ‘the one in numerical quantities’ (p. 41, l. 4) is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

of the indivisible first in each genus by predication with reference to one thing, and most appropriately of that which is first in this [way] by being the cause of unity in substances and by being that which assesses and measures the one in numerical quantities[a].

The numerical one is either indivisible by form and divisible by quantity, as [in the case of] one man, one horse, or it is indivisible by quantity and form. The latter [occurs] in two ways: if it has position, q25
then it is a point; if it has no position, then it is the universal one [84], which is the principle of number and the essential notion of all that is countable. For all notions similar to this are only analogical [notions], a22
such as measures or the weight unit [called] *sanj* and the like.

One has to know that [all meanings of] the term 'one' can be reduced to four kinds: [(i)] 'one' in continuity, [(ii)] 'one' *qua* whole and perfect, [(iii)] the simple first of each single genus, and [(iv)] universal 'one' predicated *secundum prius et posterius* or with reference to one thing of all that has been mentioned in this respect here[b].

[8] 'The same', 'the opposite', 'the other', 'difference'.

[a] 'The same' [85] is predicated in [several] ways which mirror [86] the ways in which 'one' is predicated. To these belong 'the same' in number (this concerns [things] which have two names, as when we say 'Muḥammad is Abū ʿAbdallāh' [87], and, in general, [cases] where one and the same thing is signified by two signs), 'the same'[c] in species, as when we say 'you and I are the same with respect to humanity', 'the same' in genus, as when we say 'this horse and this donkey are the same with respect to [the genus of] living being', and 'the same' in relation, in substrate and in accident, all of which have been exemplified above. These [four kinds] all belong to the class of what is essentially [the same], which is an object of research in this discipline as well as in others [88].

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a The Arabic text corresponding to 'except that (p. 40, l. 25) ... numerical quantities' is omitted in Amīn's edition.

b This paragraph ('One has to know ... here') is omitted (presumably by homoioteleuton) in ms. *H* and not taken into account by Horten and Van den Bergh. It has a close parallel in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1241, l. 9–13.

c Reading *huwa-huwa* instead of *huwa* (all mss.)

['The same'] is also [predicated] accidentally. This [mode of predication] is only used whenever one speaks about [the same] in a delimited context[a], as when we say that the musician is a physician, when a musician happens to be a physician [89]. As for 'the same' in species, if
j49 it is [predicated] of a substance one speaks of 'identical', if it is of a quantity one speaks of 'equal', and if it is of a quality one speaks of
q26 'like' [90]. The latter is predicated in [various] ways, e.g. of surfaces with equal angles and proportional sides; then it is predicated of similar
a23 bodies, if they have similar [geometrical] forms, bodies, that is, the surfaces of which are equal in number and similar in form. It is [also] predicated of [things] the forms of [qualitative] affections of which are one and the same, such as two [qualities of] red being equally red, and even so when the affection is less in one of them, like when one is redder than the other [91]. Furthermore, it is predicated of things which have a majority of characteristics in common, as when we say that tin is like silver or lead [92].

[b] As for 'opposites', this is [used] to signify the four modes [of opposition] mentioned in the *Categories*, where you already became acquainted with their description [93]. These are: affirmation and negation, contraries, [opposition *qua*] relatives, and having and privation. The term 'contrary' is often used in a wider sense than [the one explained] there, for it has been said there that true contraries are those which [belong] to one and the same genus [94], [yet] 'contraries' may [also] be predicated by analogy to these [true contraries] which never occur simultaneously in one and the same substrate, even though they are heterogeneous [95]; furthermore, 'contraries' may be predicated
m361v metaphorically in [cases] where one of these [contraries] is the cause ⟨of the other⟩[b] or where there is a relation between them in such a way

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a Reading, with mss. *H* and *M*, *ʿalā jihat al-taḥdīd*. The other mss. have either *ʿalā jihat al-taḥdhīr* ('by paying attention' *or* 'in the mode of preservation'?) or *ʿalā jihat al-taḥdīr* ('in the way of degradation'?). I. Mantino combines the first two variant readings ("per modum conseruationis vel determinationis"); cf. note 89.

b Reading *li-mā kāna min hādhihī bi-sababi ⟨l-ākhar⟩*, cf. I. Mantino, fol. 361va: "quorum vnum est causa alterius," and *Metaph.* V (Δ) 10, 1018 a 31–33: τὰ δ'ἄλλα ἐναντία λέγεται [...] τῷ ποιητικὰ ἢ παθητικὰ εἶναι τῶν τοιούτων. The addition of *al-ākhar* is furthermore suggested by the immediately following *baynahumā* which requires two preceding (pro)nouns; cf. also note 96.

that something produces these [contraries] or is affected by them [96], and generally [in cases where] there is [some sort of] relation to such [contraries].

Likewise, the term 'privation' is predicated in more ways than those listed there [in the *Categories*], for what has been mentioned there about [privation] concerns the [following] three kinds only: First, when what would naturally occurs in something is absent from it, when it should be present, and cannot occur in that [thing] in the future (as [in the cases of] baldness and blindness) [97]. Secondly, when by contrast q27
[what is absent] can occur in that [thing] in the future (as [in the cases of] being naked or being poor) [98]. Thirdly, when that which naturally j50
occurs in a [certain] substrate does not occur in it in its natural dispo- a24
sition (such as [in the cases of] strabismus or crippled limbs).

Apart from these [types], the term 'privation' is predicated in the [following] other ways: [(i)] something which naturally occurs in an existent does not occur in a [certain] thing at all, as when we say about God that He is neither mortal nor transient [99]. [(ii)] Something which naturally occurs in a genus does not occur in a thing [belonging to this genus], as when we say that the donkey is not [endowed] with reason [100]. [(iii)] Something which naturally occurs in a species does not occur in a thing [belonging to this species], as when we say that a woman is not male [101]. [(iv)] Something is absent from a thing in which it occurs naturally at another time, as when we say of a small child that it is unable to think [102].

[c] 'The other' is predicated in ways opposite to those in which 'the same' is predicated. Such are[a] 'the other' in species, 'the other' in genus, 'the other' in relation, and 'the other' with respect to the substrate [103].

[d] 'Difference' is distinct from 'the other' in that that which is other is by itself other [than something else], whereas that which is different is different [from something] in some respect, so that that which is different must in some respect differ and in some respect be identical [with that from which it differs] [104].

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a Ms. *M* and I. Mantino add *ghayrun bi-l-ʿadad*, "diuersum numero" ('the other' in number), for which there is no model in *Metaph.* nor any testimony in Ibn Rushd's *Long Commentary*.

[9] On potency and actuality. Since being is divided into potency and actuality, we have to consider in how many ways 'potency' and 'actuality' are said. We say: 'potency' is predicated in [various] ways, one of which is predicating 'potencies' of that which causes change in something else in so far as it causes change in something else, no matter whether such potencies are physical or rational, such as a hot
j51 [thing] causing warmth or the physician causing convalescence, and generally all productive disciplines [105]. [Next] it is predicated of potencies whose nature it is to be set in motion by something else, e.g. that which is susceptible to the potencies which cause change. [Then] it is predicated of all that has in itself a principle of change (in this
q28 respect nature is distinct from art [106]). [Furthermore] it is predicated
a25 of the potency to [perform] a good action, as one says that somebody has a [peculiar] ability to speak or to walk or other such [abilities] by which a person might be distinguished. ['Potency'] is also predicated of all that is scarcely affected and ⟨not⟩ easily destroyed[a], e.g. when it is predicated of [things belonging to] the category of quality [107]. Geometricians employ the term 'potency' in other ways, for they say that a certain line 'has potency' over another line, if the square on the one measures that on the other rationally[b] [108]. In all these [cases], the term 'potency' is predicated by a sort of similarity [109].

More frequent in philosophy and more wide-spread among the philosophers is the use of the term 'potency' in the sense of that by which a thing is prepared to be afterwards in actuality. This is the [kind of]

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a All manuscripts have *wa-yafʿalu bi-suhūlatin* ('and acts easily') which contradicts both the Aristotelian text as well as Ibn Rushd's *Long Commentary*. The passage Ibn Rushd is referring to is *Metaph.* V (Δ) 12, 1019 a 26–28: ἔτι ὅσαι ἕξεις καθ' ἃς ἀπαθῆ ὅλως ἢ ἀμετάβλητα ἢ μὴ ῥᾳδίως ἐπὶ τὸ χεῖρον εὐμετακίνητα, δυνάμεις λέγονται. Such things are described in the *Long Commentary* as *ashyāʾ ghayru qābilatin li-l-infiʿāli wa-l-taghyīri wa-lā bi-l-jumlati tashulu ḥarakatuhā [...] ilā an tafsuda wa-tanquṣa* or *al-ashyāʾ allati lā tataghayyaru wa-lā yashulu taghayyuruhā* (p. 583, l. 9 sq., 13 sq.). This suggests the omission of a negation through which the following verb, presumably either *yafsudu* ('is destroyed') or *yataghayyaru* ('is changed') became incomprehensible and, thus, was changed into *yafʿalu*.

b Reading *idhā qaddara murabbaʿuhū murabbaʿahū muntaqan* instead of *idhā qaddara murabbaʿuhū murabbaʿahū munqaṭiʿ* (mss. *A, D, G, P, R, T*) and *idhā qaddara murabbaʿuhū murabbaʿahū* (mss. *H, M, Q,* and I. Mantino); cf. note 108.

potency which is predicated of matter, which is, as said before, that of which the term 'potency' is predicated most appropriately [110]. For upon reflection all the things we listed [above] of which the term 'potency' is predicated, turn out to be [of such a kind] that 'potency' is predicated of them by similarity to this [mode of predication]. For we predicate 'potencies' of dispositions and forms only because they are sometimes active and sometimes not, that is, as if they were like that which is potential. Similarly, when we say that a thing has the potency for something[a], we mean that it is well prepared [for this]; and the same meaning applies to all the [cases mentioned above]. m362r

[Furthermore], one says that the parts of a thing are potentially in that thing; and this [is said] in two different ways: either qualitative [parts] (these are form and matter) or quantitative [parts] [111]. When these [latter] are continuous parts, the potentiality [of being parts of the whole] is pure [potentiality], and when they are actual [parts] of the thing, but [only] in so far as they are put together with one another or are attached [to one another], the term 'potency' is applied secondarily. Closely related to this [latter] meaning is the existence of indivisible parts in that which is combined according to those who maintain such [a doctrine of atoms]. a26 j52 q29

To this real potentiality [112] pertains that which may have an external obstacle which prevents it, so that it is possible that it occurs and possible that it does not occur, such as catching fire in grass[b], as well as that which has no external obstacle, so that it necessarily occurs and changes into actuality, as in the case of heavenly lots[c] which sometimes occur in potentiality, sometimes in actuality.

As for being in actuality, this is that which is not in potentiality. Its [various] kinds mirror the kinds of that which is in potentiality [113], and both of them mirror the kinds of categories [114]. In a certain way, potency [means] non-existence, but only those kinds of non-existence where what is non-existent naturally can exist in the future [115].

a All manuscripts have *lahū quwwatun ʿalā l-shayʾ*. Taking the above mentioned examples into consideration, one would expect *lahū quwwatun ʿalā l-mashy* ('has the potency to walk'), as tacitly edited by Amīn and translated by Horten (p. 29) and Van den Bergh (p. 22).

b Or 'brushwood'; cf. M. Ullmann, *WGAÜ*, Supplement II, p. 633.

c *Al-nuṣub al-samāwiyya* in all mss. with the exception of ms. *M* which reads *al-nisab al-samāwiyya* ('heavenly proportions'). Cf. Quirós' translation, p. 47, note 1, Van den Bergh, p. 169sq., note 22[3].

Having explained in how many ways 'potency' and 'actuality' are predicated, [we say that] 'incapacity' is also predicated in [various] ways which mirror these [modes of predication]. The predication of 'incapacity' is divided into the same classes as [that of] privation [116], that is, there is necessary [incapacity], as when we say that the diagonal 'has no potency' over [117] the side of the square, and there is possible [incapacity], as when we say that the child is incapable of walking [118].

[10] 'The complete, 'the deficient', 'the whole', 'the part', 'the total'.

[a] 'Complete' is predicated in [several] ways, firstly [of] that outside which it is not possible to find anything [of its parts], as when we say that the world is complete [119], or, in a closely related meaning, that the circle is complete, since it is not possible to add [something] to it or to take [something] away [from it] [120]. The straight line, on the other hand, is called 'deficient', because it is possible to add [something] to it or to take [something] away [from it], while it still remains
a27 to be a [straight] line [121]. Similarly, we call body 'complete', because there is nothing that could be divided into more dimensions than body, whereas line and surface are called 'deficient' because line is divisible
q30 into one dimension [only] and surface into two dimensions [only] [122]. It is also said that 'three' is a complete number because it includes beginning, middle and end (this meaning is also closely related to the [one I mentioned] first) [123]. [Furthermore] 'complete' is predicated of
j53 all that excels in its genus, as when we say a physician is complete or an oud-player is complete [124].

Now, this is how we predicate 'complete' of existents as far as they do not lack anything with respect to their perfection. However, this meaning might be transferred metaphorically to bad things, saying a thief is complete or a swindler is complete [125]. Furthermore, we call
m362v 'complete' that which has reached its completion, when this completion is in itself excellent [126]. In this way we say of the separate things that they are complete and of the caused things that they are deficient. What is most appropriately called by the term 'complete' in this way is the first principle because it is the cause of all [that there is], yet not caused by anything else, hence [because] it has attained its perfection solely by itself, while all existents attain their perfection through it. Accordingly, it is that which is most complete with respect to perfection [127]. [Finally] 'complete' is predicated metaphorically of whatever has a relation to one of the [things] to which the term 'complete' applies [in the primary sense] [128].

[b][a] 'Whole' signifies that which contains all parts [of a thing] in such a way that nothing is found outside [that thing] [129]. In general, it is synonymous with what is signified by the first mode of predication of 'complete' [130] (in this way we say of body that it is divisible into 'the whole' of dimensions). In general, 'whole' is predicated in two ways, either of the continuous (i.e. that which has no parts in actuality) or of the discrete [131]. Of the latter there are again two types, one in which the parts have positions with respect to one another (as bodily organs), the second in which the parts do not have position with respect to one another (as numbers and letters). However, one marks off the first type, which is predicated of the continuous, by the term 'whole', and the second type, which is predicated of the discrete, by the term 'total' [132]. a28.9 q31

[c] 'Parts' is predicated in two ways. Firstly, [it is predicated] in a merely quantitative sense. To this [type] belongs that which measures a thing and that which does not measure [a thing] [133]. To this [latter] belong that which is in a thing in actuality, that which is so not in actuality, that which is homeomeric, and that which is not homeomeric [134]. Secondly, the term 'part' signifies that into which a thing is divisible with respect to quality and form [135]. In this way we say that bodies are composed of matter and form and [that] the definition is composed of genus and differentia. a29 j54

[d] 'Deficient' [136] is predicated in one way of that which is not complete, as when we say that a number or a pipe-player is deficient [137]. It is also predicated[b] of that which—[though] in [the state of] completion—is not in itself excellent, even though it is complete with respect to its genus. In this way we say of any existent that it is deficient in relation to the first principle [138]. a27.16

As for that which is deficient with respect to quantity, this is not predicated arbitrarily, but rather is it necessary [(i)] that the thing [of which it is predicated] is one of [the things] whose parts are connected with one another, yet without being homeomeric parts, [(ii)][c] that that

a Amīn moves section 10[d] (cf. below) without any evidence in the manuscripts to the present place.

b The Arabic text corresponding to the preceding two lines (from 'in one way' up to 'is also predicated') is omitted by homoioteleuton in ms. *H* and ignored in all modern translations.

c Reading, with mss. *H, M, P* and I. Mantino, *wa-* instead of *aw* in the remaining mss.

which is said to be missing is naturally found in the thing in question, and [(iii)] that this deficiency does not abolish the substance of this thing [139]. For a thing whose substance is abolished through the abolition of that [which is missing] is not called 'deficient'. 'Deficient' is also predicated of artefacts by comparison to this meaning [140]. As for 'excessive', this is predicated of the opposite of 'deficient'.

a29.7 q32 j55 **[11]** 'Prior' and 'posterior' are predicated in five ways [141]: Firstly, prior in time. Secondly, prior in order, either with respect to[a] a determined beginning, or in speech [142], or in place. Thirdly, prior in nobility. Fourthly, prior in nature. Fifthly, prior in terms of causality. As you have already learnt in the *Categories* what each of these classes signifies, there is no need to reiterate this [here]. 'Prior' is also predicated in a sixth mode, namely 'prior' in knowledge, for not all that is prior in knowledge is prior in existence.

[12] 'Cause' and 'reason' [143] are two synonymous terms, both of m363r which are predicated of the four [types of] causes, i.e., matter, form, agent and end [144]. [Furthermore, 'cause'] is predicated analogically of that which is related to these [four types of cause]. As explained elsea30 where, there are proximate and remote causes, those which are essential and those which are accidental, particular and universal [causes], as well as combined and simple [causes]; and each of these types occurs either in actuality or in potentiality [145]. Furthermore, causes [are divided] into those which are [present] in the thing itself, namely matter and form, and those which are outside the thing, namely agent and end [146].

[13] 'Matter' is predicated with respect to [different] levels. One of these is first matter, i.e. [matter] without form [147], another is [matter] with form, as in the case of the four elements which [serve as] matter for combined bodies. This kind of matter is of two types, firstly the one just mentioned, which is distinguished by [the fact] that the form in these [elements] is not entirely destroyed when receiving another form, j56 q33 but rather the form of the matter is found in them in some intermediate state, as has been shown in the book *De generatione et corruptione* [148]. In the second type, the form of the matter remains [the same] when a

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a Reading, with ms. *M* and I. Mantino, *min* instead of *fī* in the remaining mss.

second form occurs in it, such as the disposition to receive soul, which is found in certain homeomeric bodies [149]. It is especially this [type of matter] to which [one refers by] the term 'substrate'. [Furthermore] the parts of that which is combined with respect to quantity are called matter for the combined [thing]. In this way those who maintain [the doctrine of] indivisible parts apply the term 'matter' to such [atoms]. Now, these are the modes in which 'matter' is predicated in philosophy.

[14] 'Form' is also predicated in [several] ways. To these belong 'form of simple bodies' (i.e. of non-organic bodies), 'form of organic bodies' (i.e. soul), and 'form of celestial bodies' (these are similar to a31
simple [bodies] inasmuch as they are non-organic and similar to organic [bodies] inasmuch as they are moved by themselves). All this has been shown in the natural sciences [150]. [Furthermore] 'form' is predicated of the quality and the quantity emerging in that which is mixed in so far it is mixed [151]. In this respect, the forms of homeomeric bodies differ from one another and adopt specific [properties], such as being difficult to destruct (which applies to gold) and other specifications.

[15] 'Principle' is predicated of all [things] 'cause' is predicated of [152]. [Then] it is predicated of that from which something begins to move, such as the outermost point of a path, for this is the principle of walking [this path] [153]. [Furthermore] 'principle' is predicated of that from which a thing would best be originated, as in the case of teaching, for sometimes one does not start teaching from what comes first by nature, but rather from what is most easily [comprehensible] [154]. All j57
other [things] of which 'principle' is predicated, are called ['principle'] merely by analogy to one of these meanings. E.g., we say of premises q34
that they are the principle of a conclusion, yet this applies to them only in so far as they are [conceived] either [as] that which brings about the conclusion or [as] its matter [155].

[16] 'Element' is primarily predicated of that into which a thing may be resolved with respect to [its] form. In this way we say of the four bodies, that is water, fire, air, and earth, that they are elements of all combined bodies [156]. According to the view of the Atomists, 'element' is also predicated of that which is conceived as the smallest part of a thing [157]. Furthermore, one says that universals are elements of the particular things based on the assumption that they are the prin-

ciples of the things, and that the more universal something is, the more appropriate it is to be an element [158].

[17] 'Necessity' is predicated of that without which a thing cannot
a32 exist, and this on account of [its] matter [159], as when we say that
m363v living beings which have blood necessarily breathe. [Then] 'necessity' is predicated of compulsion, i.e., the opposite of free choice. For this reason, Greek poets described it as irksome and sad [160]. [Furthermore] 'necessity' is predicated of that which cannot be otherwise or in a different way [161]. In this way we say that the celestial [bodies] are by necessity eternal [162].

j58 **[18]** 'Nature' is predicated of all four kinds of change, i.e., coming-to-be and corruption, locomotion, growth, and alteration. Furthermore, it is predicated of forms which are the principles of such movements. These are most appropriately [called] by the term 'nature' [163], especially those which are simple, for ⟨the principles⟩ of organic ⟨movements⟩ are most appropriately called soul, such as the principle of growth[a]. In this [mode of] predication we hear the physicians say 'na-
q35 ture has done this or that' implying [by 'nature'] the faculty which manages the body, i.e., the nutritive [faculty], because they conceive it as being more simple than the other faculties, although it is organic (for that reason they apply [the term] 'nature' only occasionally to the faculty of the heart). It belongs to this mode [of predication] that we say

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a The transmission of this clause is lacunose in all Arabic manuscripts. As transmitted there, it would mean 'for that which is organic is most appropriately called soul, such as the principle of growth', which makes little sense and obviously cannot serve as an argument for the preceding statement that form *qua* principle of motion, and especially simple forms or principles, are called 'nature'. It is not the organic body, but rather its form or principle that might be called 'nature' in this sense. Furthermore, the transmitted wording contradicts the immediately following sentence, in which Ibn Rushd mentions the habit of physicians of referring to the nutritive faculty of the soul as 'nature', '*although* it is organic' *(wa-in kānat āliyya)*, that is, although it does not deserve this name considering its organic nature, but is called so only on the basis of the physicians' assumption that it is the most simple faculty. I therefore propose the following reading, on which the above translation is based: *li-anna ⟨mabādiʾa l-ḥarakāti⟩ l-āliyyati hiya aḥrā an tusammā nafsan ka-mabdaʾi l-numūw*. Cf. also *Long Commentary on the Metaphysics*, p. 514, l. 17 – p. 515, l. 4, dealing with the form and the principle of motion of growth.

that a natural act stands in opposition to a rational [act] [164]. Furthermore, the term 'nature' is applied to the elements things are combined of. In this [way] we say that the nature of homeomeric bodies [consists] in water, fire and the other simple [elements] [165]. 'Nature' is also applied to [various] kinds of matter; and it is predicated generally of all kinds of form, matter, and their concomitant kinds of change.

Having achieved our first goal of explaining the meaning of the terms [employed in] this science, we shall now turn to its single objects of research. a33

j59 q36

CHAPTER TWO

As said before, 'being' is predicated in [various] ways. However, in the present chapter we concentrate on that [meaning] of being which refers to the ten categories which hold the position of species with respect to the subject genus of this discipline.

It is clear that 'being' does not signify the [ten categories] by pure equivocation, for, if that were the case, it could not be the subject genus of one single discipline (i.e., this discipline [of metaphysics]) and there would be no essential predicates by which a primary division is established[a], as when we say that there is being in potentiality and being in actuality or any other essential predicate to be found in [propositions of] this [kind]. [Besides,] essential predicates are not found in propositions the subject of which is an equivocal term [166]. All this is clear to anybody who has studied the discipline of logic.

Nor does the term 'being' signify the [categories] univocally, for if that were the case, the ten categories would [form] a single genus or [fall] under a single genus, while sensation gives evidence of their diversity and multiplicity [167]. Nevertheless, some of the early ancients held the position that being is one, yet what led them to this [theory]
q37 was the lack of attention they paid to objects of sensation and their
a34 compliance with sophistic doctrines. Aristotle refuted their [theory] in Book I of the *Physics* [168], and we ourselves will speak about them in the discourse on the subject matters of the departmental disciplines [169].

m364r Now, if all this is as we say and the term 'being' signifies the ten categories neither by pure equivocation nor univocally, it cannot signi-
j60 fy them other than by some sort of analogy, that is in the way terms signify things related to one thing through a relation of priority and posteriority (this will become clear [below]), as when we speak of things related to medicine as being medical or [of things related] to war as being martial [170]. Since it is the task of this science to set the kinds of being in relation to one another with respect to the [question which] of them are causes of others, up to [the question how] all of them are related to their most remote causes, as stated above [171], we have to look carefully at this [question] with regard to all categories and to consider how they are related to one another with respect to being,

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a Reading, with most mss. and Amīn, *yanqasimu bihā* instead of *tanqasimu bihā* (Jihāmī) and *yanqasimu* (Quirós).

which of them is prior to which, whether there is a category through which the remaining categories are constituted, and [if so] which category this is and what it is that in turn constitutes this category [172].

Thereafter, we shall turn to stating the causes of the general concomitants of the [categories] in so far they are beings, such as potentiality and actuality and the like [173], as far as we are able to state all this in this first part of this science. As for the remaining [task of] dealing with the most remote causes of these things, we defer this to the second part of this science [174] where it will become clear.

The proofs used for [demonstrating] these things are for the most part logical ones. This is due to [the fact] that that which is proved in q38
the discipline of logic is employed in two [different] ways, as stated elsewhere, [i.e.] either as instruments, methods and rules which guide the mind and preserve [it] from error (this is its specific [mode of] a35
employment), or by taking what is proved there as if it were part of [any] demonstrative discipline and, hence, can be employed in another discipline as a sort of postulate or supposition in accordance with the common practice of the demonstrative disciplines to employ in one what has been proved in another [175]. E.g., those who practise the discipline of mathematical astronomy take for granted from the geometer that the half of the radius equals the side of the [inscribed] hexagon.

It has [now] become plain what we aim at in this part of [our] consideration and which kind of arguments we employ in it. Thus we shall start the discussion [proper]. We say: As stated in the *Categories*, j61
there are two kinds of universal predicates. One kind makes known the quiddity and essence of an individual substance. The most general universal of this type is the category called 'substance'. The other [kind] does not make known the quiddity and essence of an individual substance, but only that which is not substance[a]. In general, this [kind] is found in a substrate only, which is why one states in its definition that it is that which is called 'in-a-substrate' [176] (whereas one says of the

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a Reading, with mss. *H, P, R*, and I. Mantino, *mā laysa bi-jawhar*. This reading is confirmed by mss. G^{marg} and T^{marg} both of which add in margin *bi-māhiyyatihī lahū*. Ms. *M* has *mā laysa bi-jawharin lahū wa-lā māhiyya* ('that which is not its substance nor its quiddity'), misrepresented in ms. *D* as *mā laysa bi-jawharin bi-māhiyyatihī lahū* ('that which is not by its quiddity its substance').

substance that it is that which is not predicated of a substrate[a]) [177]. The most general universals of this type are the nine categories of accident enumerated in that [book], i.e. quantity, quality, relation, where, when, position, having, doing, and being-affected.

Taking this as a basis, it is in general evident that the category of substance is self-constituted and with respect to its existence independ-
q39 ent from any of the accidental categories, while these in turn depend for
a36 their existence on substance and are caused by it. However, we have to investigate carefully how things stand with each single category.

m364v We say: As will become evident soon, 'substance' is used in the definitions of three categories, namely where, position, and having. This is shown by their definitions because in all of them 'body' appears, as when we say 'where is the relation between body and place', and similarly in [the definitions of] position and having [178]. Regarding the category of doing and being-affected, things are clear as far as [doing and being-affected] in substances are concerned. Furthermore, the disposition of [doing and being-affected] in quantity and quality is similar to the disposition of the categories of quantity and quality [themselves]. [This concerns] especially the category of being-affected, for being-affected with respect to quantity always concerns the substance, such as nutrition causing growth or a body moving another body in space [179]. In the [category of] quality, on the other hand, [being-affected] concerns accidents such as heat causing warming up [180]. As far as the four categories of quantity, quality, relation, and
j62 when are concerned, it is clear that they depend on substance for their existence, although the category of substance does not appear in their definitions.

Regarding the category of relation it is clear that it is among the [things] which cannot be separated [from its substrate], since substance is not its sole substrate, but the remaining categories are [also] found among its substrates, such as an existent of [the category of] quantity in the case of double and half, or an existent of [the category of] where in the case of above and below[b].

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a Reading, with mss. *A, G, H, R,* and *T*, *alladhī yuqālu lā ʿalā mawḍūʿ*. Mss. *D, M, P, Q*, and I. Mantino read *alladhī yuqālu ʿalā mawḍūʿ* ('that which is predicated of a substrate'); cf. p. 30 and 58 of the translation, also notes 39 and 176.

b Reading, with mss. *H* and *Q* and in analogy to the preceding phrase,

Likewise, it is immediately evident in the case of the category of quality that this is an accident and that it cannot be separated from matter[a], let alone [from] other things [181]. Otherwise, affection would occur in what is not affectable, shape in what is not shapeable, state in a37
what cannot be in a state, and natural capacity in what cannot have a q40
natural capacity (these being the four major genera of quality) [182].

As for the category of quantity, it is not so evident that it depends on substance, especially [in the case of] the discrete [quantity]. But also [in the case of] the continuous [quantity], if we take into consideration that one of its kinds is body which may be defined as that which is divisible into three dimensions [183]. This is why some thought that the [three] dimensions are substances and that they are that which makes known the quiddity of the concrete individual substance. This view led some [of them], namely those who taught that the objects of mathematics are separate [entities], to the doctrine of separate quantities [184].

But we say that it is immediately self-evident that the [three] dimensions are not among [the things] that make known the quiddity of the individual substance and that, when they are used to describe the individual substance essentially, the species or genus of this individual is used in the definition of this [quiddity] in the way one uses the substrates of accidents or the genera of their substrates in definitions of the [substances in which they occur]. Such a description is not used in the definition of this individual[b] in the way we use predicates [indicating] the causes of the substrates in definitions of that [which pertains to this species] [185]. For example, we say of man and many [other] living beings that they are [entities] of such and such a size because each of these [living beings] has a specific spatial extent. However, it is generally evident with respect to ensouled beings that the dimensions are j63
posterior to them and that soul and being-ensouled are prior to them. Likewise, it is also evident that physical entities are prior to the di-

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al-mawjūd fī l-ayn instead of *al-mawjūdayn fī l-ayn* ('[or as above and below] existing in [the category of] where'), since *al-mawjūd* refers to the substrate of the relational existent, not to the two relatives themselves.

a Reading, with mss. *H, M* and I. Mantino, *al-mādda* instead of *al-mādda al-ūlā* ('prime matter') in the remaining manuscripts.

b Reading, with mss. *H, M*, and I. Mantino *fī ḥaddi dhālika l-shakhṣ*, instead of *fī ḥaddi nawʿi dhālika l-shakhṣ* ('in the definition of the species of this individual') transmitted in the remaining mss.

mensions imagined within them. And these together form the entirety of individual substances, for all individual substances are either ensouled or physical.

a38 q41 As for the doctrine of a most general genus to be found in substances and [the questions] what this is, whether it is itself body or something m365r to which body is accidental, and if the latter, what that is to which corporeal existence is accidental, this will be clarified after it has become clear what the principles of sensible substance are and in which way species, genera, and, in general, universals exist [186].

As for those who maintain that there are separate quantities, if they refer [with their doctrine] to the quantity which [exists] in sensible things, then [we say that] it has already become clear in the *Physics* that it is impossible to detach prime matter from [quantity] as it is also impossible to detach [quantity] from form; otherwise the individual substance would exist without quantity, which is absurd [187]. Furthermore, it has been shown in the *Physics* in [the context of] the inquiry on the existence of the void that spatial extension cannot exist separately [188]. Likewise, it has been shown there that time is in a substrate, namely the celestial body, and from this it is evident that the category of 'when' is constituted through the substance [189]. For a thing is related to time only in so far it is changeable or one conceives a process of change in it. But the changeable is necessarily a body, as has been shown in the *Physics* [190].

Number belongs to discrete quantity, for it is nothing more than the entirety of monads, as its common definition goes [191]. As said above [192], 'unit' signifies primarily a general concept adopted by the mind from the isolated [apprehension] of things with respect to their places or limits and generally [it signifies] things extrinsic to the essences of things. It is therefore necessarily an accident [193]. We will show below [194] that it is an act of the soul rather than an [extramental] existent [195].

From these [considerations] it becomes plain that none of the nine a39 q42 [categories of] accidents can be separated from substance. On the con- j64 trary, substance is prior to each of them in the way cause is prior to that which is caused. And it is not only this mode of priority with respect to the accidents that is found in [substance], but rather [also] priority with respect to time and [priority] with respect to knowledge (in how many ways 'prior' and 'posterior' are predicated has been explained earlier).

As for [the question] whether there are separate quantities, which exist distinctly from the existence of this sensible quantity, [and] form the subject matter of the discipline of mathematics, as maintained by the Pythagoreans, this we will investigate in [the chapter on] the verification of the subject matters of the departmental disciplines [196].

As for [the question] how these nine [accidental] categories exist in substance and whether this [existence] is hierarchically ordered in such a way that some of them somehow cause the existence of others in substance, or instead [in such a way that] their existence in [substance] is of one and the same rank so that none of them is prior to the other, it is evident[a] that some of them depend on others existing prior to them in substance. E.g. it is evident that quantity is the first among them with respect to prior existence in substance, for there is nothing in which quantity[b] is found except body [197]. Likewise, there is found no place except in that which has body *qua* body [in it][c], and also no position except in that which has place, and neither doing nor being-affected except by means of position and where. All this is evident from what has been shown in the *Physics* [198]. And similarly the category of having is found in nothing that is not previously body and has where and position [199]. It is not precluded that two of these [accidental categories] exist in a thing equally ranking[d]. [This occurs], for example, with quality and where, for neither seems to be prior to the other with respect to its existing in substance.

From this discussion it has become evident that [all] nine [accidental] categories exist in substance, and it has also be shown in which way some of them are prior to others with respect to their existence in substance. Hence, what still has to be investigated are the elements and principles of substance and, in general, [the question] whether there are principles of the sensible substance prior to it, and if so, of what kind a40 q43 j65 m365v

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a Omitting, with I. Mantino, *aydan* ('it is *also* evident').

b Reading *kammiyya* with the majority of the manuscripts instead of *kayfiyya* ('quality') transmitted in mss. *H* and *Q* (adopted by Amīn and Horten); cf. note 197.

c Reading, with mss. *M, P*, and I. Mantino, *illā li-dhī l-jism* instead of *illā lladhī l-jism* ('except that which is body') in the remaining mss.

d Reading, with the majority of the manuscripts, *fī rutbatin wāḥidatin li-shay'* instead of *fī rutbatin wāḥidatin* transmitted in mss. *H* and *M* (adopted by Quirós and Amīn).

[200]. This issue was an unresolved problem and [cause of] severe disagreement among the ancients. Besides, this investigation precedes the investigation in which we ask whether or not there is a separate substance which is the principle of the sensible substance, and if so, what is its mode of existence [201].

We say: The term 'substance' is applied in [various] meanings, as explained above [202]. Yet, the meaning which is most wide-spread and accepted by everybody is the concrete individual [thing] which is neither in a substrate nor predicated of a substrate, such as the individual man, animal, plant, star, or stone. Accordingly, we have to direct our investigation to the principle of this sensible substance. We have already stated earlier that the opinions of the ancients differed regarding [the question] what it is that constitutes such sensible substances and which are their parts. Some maintained that they are composed of indivisible parts, either finite or infinite [in number]. Others maintained that corporeality is what constitutes them, and since the meaning of corporeality is divisibility into the dimensions [of space], they maintained that the [three] dimensions are what is most appropriately [called] by the term 'substance'. [Furthermore], since the dimensions are, in the imagination, surfaces [of solids], and [since] surface can be dissolved into line and line into point, they maintained that points are substances. Again others maintained that the universals which are predicated of [sensible substances] are their principles in the mode of self-
q44 constituted entities [203]. They all agreed in general upon [the existence
a41 of] a material cause, except that some of them called it indivisible parts, others fire or air, and whatever else each of the ancients regarded as [material cause].

The invalidity of most of these unsound views has already been shown in the natural sciences. [Moreover] it became plain there that all sensible existents are composed of matter and form; and it has been
j66 shown there how many kinds of matter and form there are, except that these are considered there only in so far as they are principles of changeable being or, generally speaking, principles of change [204]. Accordingly, that which is set forth in unsound doctrines on this [topic] is criticized there from this point of view, as [in the case of] the doctrine of indivisible parts and other doctrines this science is responsible for refuting.

Here [in metaphysics], on the other hand, these [principles] are considered in so far as they are principles of substance *qua* substance. By

analogy, that which follows with respect to the [principles] from unsound doctrines is criticized here from this point of view, as [in the case of] those who maintain that the universals of substances are their principles or those who maintain that the [three] dimensions are that which constitutes substance (to be sure, this [latter] doctrine might be considered in both modes, [that is] in this science [of metaphysics] as well as in natural sciences, as Aristotle indeed does in Book III of *De caelo* [205]).

As for Ibn Sīnā, he erred in this [question] completely, for he thought that he who practises natural sciences cannot show that bodies are composed of matter and form and that it lies in the responsibility of the metaphysician to show this [206]. The invalidity of all this is self-evident to anybody practising the two sciences (i.e., physics and this science [of metaphysics]).

Now, if this is as described, and it is plain which method this science [uses for] considering this question, we shall proceed in this consideration from what is better known to us. This is definition, for one of the meanings to which the term 'substance' is applied, is definition. This is why [philosophers] say that definition is that which makes known the substance of a thing [207]. Besides, we usually proceed from what is better known to us to what is better known by nature, as stated elsewhere. Hence, we say once again: Definition is the proposition which makes known the quiddity of a thing through the essential constituents of this [thing]. As has already become clear in the discipline of logic, there are two kinds of predicates, one essential, and one accidental kind. Essential [predicates] are again subdivided into two kinds: First, predicates which are parts of the substance of the subject [of predication] (these are the specific [predicates] of which definitions are composed), secondly [the case] that the subjects [of predication] are [included] in the substance of the predicates (from these [predicates] one cannot compose a definition, since they [refer to] things posterior to the substances defined) [208].

a42 q45 m366r j67

If you consider the problem from this point of view, it will therefore easily become evident that concrete individuals have parts prior to them through which they are constituted and [that] this meaning [of 'definition'] is found in substances only because[a] the definition of an indi-

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a Reading, with the majority of the Arabic manuscripts and I. Mantino, *illā*

vidual accident certainly includes the substance through which the [definition] is constituted and which is different from this [accident] [209]. Hence, there is no definition in the strict sense for [individual accidents]. Nor, in the case of what is combined of accident and substance, is there the sort of definition [we have] for what is combined of matter and form[a] [210], as will become evident below [211].

Taking this into consideration, it is completely evident that [the definition of] the individual substance is not constituted by any of the categorial predicates, since having a quality, quantity, relation, where,
q46 when, doing, being-affected, position, or having does not make known the quiddity of the individual concrete substance or any part of its quiddity. This shows the difference between substantial forms and accidents, even though both are predicated of the substrate[b].

a43 If this is as described and it is plain that there are parts of the substance prior to it, we should consider in which way these parts exist in the substance[c] and whether that which is universal is accidental to them or rather something which is prior to them as maintained by those who teach [the existence of] Ideas. Generally, we [have to] consider all concomitants adhering to them both in so far as they are individual sensible [things] or parts of sensible things and in so far as they are intelligibles and universals (for the two modes of existence [have to be] kept apart). Furthermore, if definition is [composed] of a plurality of parts, [we have to consider] how these parts exist in that which is combined, whether this is in potentiality or in actuality, and in general,
j68 in which way we say of the definiendum that it is one, while according to [its] definition it is [composed] of a plurality of parts. [In other words,] we [have to] make known how definition is related to its parts and to the definiendum [212].

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li-l-jawhari faqaṭ li-anna instead of *illā li-l-jawhari faqaṭ wa-li-anna* ms. *M* (adopted by Quirós) and *li-l-jawhari faqaṭ bal wa-* ms. *H* (adopted by Amīn, Horten, p. 52, and Van den Bergh, p. 36).

a The Arabic text corresponding to 'certainly includes...' up to 'matter and form' is omitted in ms. *H*, secluded by Amīn (p. 42, note 7), and ignored in the translations by Horten and Van den Bergh. The versions edited by Quirós and Jihāmī are faulty.

b The present sentence is omitted in ms. *H*, secluded by ed. Amīn (p. 42, note 11), and ignored in the translations by Horten and Van den Bergh.

c Reading, with mss. *H, M* and I. Mantino, *al-jawhar* instead of *al-jawhariyya* ('substantiality') in the remaining mss.

In a certain way, this consideration will comprise substance and accident, provided that we admit that there are certain definitions of accidents. Its primary aim, however, [consists in] determining substance, and therefore, it is definition which must be considered at the first place.

We say: It is evident that definition is found primarily and by priority in substance and that it is found in the remaining categories, if at all, by posteriority [213]. This [is so] because, even though there are in the remaining categories, as in the case of substance, essential predicates from which one might compose a definition of that [which pertains to these categories], it is nevertheless necessary to include in its definition additionally a definition of substance, because it belongs to that which is not self-constituted. This [inclusion occurs] either by proximate potentiality or in actuality [214], in potentiality, that is, in the case of categories whose definition does not make evident their relation to q47
substance, in the way explained above. [This is] especially [the case] when they are employed [in the definition] as abstract [concepts] in the mind and [when] one refers to them by terms which are root morphemes, such as 'whiteness' employed [in the definition] as an abstract [concept] in the mind, of which one says that it is the separating colour m366v
for vision [215], and even more so [in the case of] magnitude and shape. But when they are employed [in the definition] by means of paronymous terms, which signify them more properly, then the substance is made evident in their definition. *Simplicter* [216] substance is made actually evident in definitions of accidents only in [the case of] categories in whose definition substance [has to be] employed, and generally in [the case of] essential accidents in whose definition one employs their substrate or the genus of their substrate. 'Snub nose' is in this way [related] to 'nose', and 'laughing' to 'man', which is why the names of these [*per se* accidents] signify something combined from accident and substance [217]. a44

Combined [terms] such as these[a], as stated by Aristotle, either have no definition at all [218] because of that which [has to be] added in their definition [219] and [because their definitions] are tautological (for he

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a The Arabic text corresponding to 'the names of these...' up to 'such as these' is omitted in ms. *H*, secluded by Amīn (p. 44, note 4), and ignored in the translations by Horten and Van den Bergh.

who defines 'snub nose' employs in its defintion the definition of 'nose' and the definition of 'hollowness' which is in the [nose], and in the [latter] he employs [again] the [definition of] 'nose'; thus he employs in this [definition] 'nose' twice)[a] [220]. Or else, if there is [a definition for them], it is in a mode posterior to the substance combined of matter and form [221], since these definitions are in any case defi-
j69 nitions of combined [terms][b].

Having shown that there are for all categories definitions which signify their quiddities and that it is [only] substance for which there is definition in the strict sense and which has a substantial quiddity[c], we shall now consider [the question] whether the quiddities of substances and their universal intelligibles are the individual things themselves (as we say that the imagination of a thing is the thing itself and that form of a sensible thing means [the same as] sensible [thing]) or whether they
q48 are different from them in some respect, so that they have an existence outside the soul as maintained by those who teach the [existence of] Ideas[d] [222].

We say: Predicates[e] which are the quiddity of a thing, I mean those which serve as notion of the substance of the individual thing, are the

a The Arabic text corresponding to 'and [because their definitions]' (p. 61, ult.) up to 'nose twice' is omitted in ms. *H*, secluded by Amīn, and ignored in the translations by Horten and Van den Bergh. I follow ms. *M*, I. Mantino and Quirós in reading *yaʾkhudhu* instead of *yaḥuddu* in the remaining manuscripts (adopted by Jihāmī and Amīn, p. 44, note 4).

b The second half of this sentence ('combined of matter ... combined [terms]') is omitted in ms. *H*, secluded by Amīn (p. 44, note 4), and ignored in the translations by Horten and Van den Bergh.

c The Arabic text corresponding to 'and that it is ... substantial quiddity' is omitted in ms. *H*, secluded by Amīn (p. 44, note 5), and ignored in the translations by Horten and Van den Bergh.

d The Arabic text corresponding to 'as maintained ... Ideas' is omitted in mss. *H* and *M*, hence also in Quirós and in the translations by Horten and Van den Bergh. It is supported by *Metaph.* VII (Z) 6, 1031 a 30sq., and by Ibn Rushd's *Long Commentary on the Metaphysics*, p. 823, l. 14sq.

e I follow the majority of the manuscripts which read *al-maḥmūlāt*, ms. *H* and I. Mantino read *al-kulliyyāt al-dhātiyya*, resp. "universalia essentialia." This variant reading seems to be caused by the omission through homoiarchon of the following qualification of these 'predicates' (i.e. *allatī hiya māhiyyat al-shayʾ aʿnī*) omitted in ms. *H* and I. Mantino. Ms. *G* displays the hybrid version *al-maḥmūlāt al-dhātiyya*.

same as the individual thing [itself] in the sense stated [above], i.e., in so far as they make known the substance of the individual thing. But predicates which are accidental are not the same as the thing [itself]. For, if a physician is accidentally an architect, the quiddity of being a physician is not [included] in [the quiddity of] being an architect, nor is being a man [the same as] being a white man. In these [cases] the predicate and the subject are one and the same thing only accidentally, as opposed to how things stand with essential predicates[a]. If essential a45
universals of a thing were not the same as the individual thing [itself] (I mean the subject [of which they are predicated]), the quiddity of a thing would not be [the same as] the thing [itself]. Hence, the quiddity of living being, for example, would not be [the same as] this concrete living being, and knowledge [of the concrete thing] would become impossible. Even more, there would be no intelligible [concept] for anything at all [223].

Those who assume that these universals are self-constituted[b] and separate have to admit that they are in some way distinct from the individual things. If this is what [they] assume they have to admit one of the [following] two consequences: [(i)] Either these universals are not the intelligible [concepts] of these individual things. But then they are of no use for conceptualizing these individual [things], which is in contradiction to what they teach, for they introduce and teach [the existence of] separate universals in order to [explain] knowledge. [(ii)] j70
Or we concede to them that such universals are [entities] which make known the substances of these individual [things] and that the quiddities of the latter are intelligible through them. However, even if this is [conceded], necessarily these universals, which are separate in so far as they exist outside the soul and which are distinct [from one another] in

a Instead of the Arabic text translated here by 'nor is being a man ... essential predicates', ms. *H* reads *wa-yushbihu an yakūna l-amru fī l-kulliyyāti llatī bi-l-ʿaraḍi naẓīra l-amri fī l-khayālāti l-kādhiba* ('it seems that the case of accidental universals is comparable to that of untrue imaginations'). This variant reading has been adopted by Amīn and in the translations by Horten (p. 55) and Van den Bergh (p. 38). All remaining manuscripts (including I. Mantino, with minor variants) transmit the text as translated above and supported by *Metaph.* VII (Z) 6, 1031 a 19–25.

b The early testimonies, mss. *H, M*, and I. Mantino have *qāʾimatan bi-anfusihā*, all other mss. have *jawāhira qāʾimatan bi-anfusihā* ('are self-constituted substances').

q49 the way things existing outside the soul are distinct from one another, are likewise in need of other universals in order to become objects of intellection [224]. For if there has to exist something outside the soul in order that a thing existing outside the soul can become an object of intellection, then for this former is likewise necessary what is necessary
m367r for the latter, and this goes on infinitely.

From this it is plain that [the fact] that we think quiddities of things does not necessarily presuppose the doctrine of the existence of separate universals. No matter whether or not they exist, nay, even if they do exist, they are of no use for thinking the quiddities of things nor, in
a46 general, for [the realm] of sensible existence [225]. As for [the assumption] that these universals of which definitions are composed are eternal and unchangeable † ... †[a].

† ... † and that, if they exist by themselves outside the soul, according to the opinion of those who teach [the existence of] Ideas, they are, considered as such, of no use for [the realm] of sensible existence [226]. This is shown by [the fact that] each [thing] that comes to be is something (I mean form and natural disposition) and from something (I mean matter) and through something (I mean an agent) [227]. [Furthermore] it is evident that in whatever comes to be, no matter whether by nature or by art, the agent is necessarily distinct from the effect in number, but one and the same as the effect in quiddity and definition or by relation [to the proximate higher genus]. As far as natural combined entities are concerned, this is in most cases evident, e.g. [in the case of] reproducing animals and plants. For either that which produces is of the same species as that which is produced, as man produces man and horse [produces] horse, or it is similar and related [to one and the same genus], as donkey procreates mule [228]. This is also evident in simple [bodies], for fire in actuality produces fire in actuality.

j71 However, one might have one's doubts in [the case of] animals re-
q50 producing spontaneously and plants reproducing in this way, as also [in the case of] fire, for it might be produced by striking flintstone and, in general, by motion [229]. Similarly, it is evident that there are movers which do not pertain to the genus of that which is moved [by them],

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a In all manuscripts the clause breaks off after *ghayru mutaghayyira*. I. Mantino, Quirós and Van den Bergh do not recognize the lacuna as such. Due to this *lacuna*, the beginning of the following sentence is corrupted, too; cf. note 226.

such as semen setting the menstrual [blood] in motion, so that it becomes man, or the heat [produced by] incubation which sets the egg in motion, so that it becomes a bird. We say, however, that it is evident in most of these moved things[a] that they are [set in motion] by a combination of more than one mover, such as the father sets the semen in motion, and the semen the menstrual blood. And if this is as described, the mover, which necessarily must be one and the same as that which is a47
moved, [either] in quiddity or by relation or similarity [to the proximate higher genus], is the ultimate mover, since it is this which supplies the proximate moved [thing] with the potency whereby it moves. Hence, the ultimate mover of the semen is the father, and [that] of the egg is the bird. However, it has already been shown that this [explanation] is not sufficient unless [one takes into consideration] an [additional] external principle[b],

as has been shown in the natural sciences [230].

The reproduction of animals and plants which reproduce spontaneously [results] from the heat of the stars. However, this heat is not the ultimate mover of their coming to be. On the contrary, it has been shown that there is a

which [consists in] the celestial bodies according to Aristotle's view (which is correct) or in the active intellect according to the view of many recent philosophers.

As for animals and plants reproducing spontaneously, their ultimate movers are, according to Aristotle's doctrine, the celestial bodies [which move] by means of the psychic potencies emanating from them, or the active

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a Reading *al-mutaḥarrikāt* instead of *al-mutakawwināt*.

b The following section has been transmitted in two versions. In the left column I give the translation of the version transmitted in ms. *H* (adopted by Amīn, p. 47, l. 4–7, and translated by Horten and Van den Bergh), in the right column that of the remaining manuscripts (printed in Jihāmī, p. 71, l. 12–20). Quirós' edition (p. 50, l. 12 – p. 51, l. 4) offers an (imaginary) hybrid version based on mss. *H* and *M*. The two versions got mixed up in the Hebrew tradition which is why I. Mantino's translation (fol. 367 rb) follows in the first short passage the version given in the right column, then the version contained in ms. *H*, to which he adds then also a translation of the remaining part of the other version; cf. also note 231.

mover related to them [in genus] which gives them their substantial form. The only reason why this mover is not one and the same as that which is moved in quiddity is that it is immaterial, as has been shown.

intellect, according to how the recent philosophers interpret [Aristotle]. Aristotle['s doctrine] is supported by [the facts] that that which changes and comes to be is nothing but body or that which is in a body (I mean a corporeal potency), that the actuality which stands at the end of the [process of] change is reached only through the agent of the [process of] change, and that it is impossible that the agent of the [process of] change is one thing and the agent of the end of this [process of] change another thing [231]. q51

As for the motion which produces fire, its agent is not the motion [itself], but rather [something which is] one and the same in genus, namely the heat diffusing from the heat of the stars upon the elements
m367v and [also] the heat of the air itself. That which is given by motion in
j72 this [process] is [not the form of fire but] only the disposition whereby the substrate receives[a] the form of the fire. You can verify this by [considering] cotton set on fire by the sun through rays [of light] reflected from a piece of glass. For the only effect [produced] by the rays in this [process] seems to consist in[b] their preparing the air for receiving the heat through which the cotton is set on fire (for light is not fire, as has been shown [232]). Furthermore, motion is a sort of life for natural
a48 things [233]. In a certain way, it brings the fiery parts which exist in the air in [the state of] proximate potentiality to pure actuality. This is why fanning nourishes the substance of fire. From this point of view, it is quite possible that that which somehow preserves the form of fire, which is [located] in actuality in the concave interior of the lunar

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a Reading, with mss. *H, M, Q,* and I. Mantino, *yaqbalu* instead of *faʿala* ('effects') of the remaining manuscripts.

b The Arabic text corresponding to 'reflected ... consist in' is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

sphere, is the motion of the celestial body, as has been shown in the natural sciences [234]. For it has been shown there regarding these elements that they are related to the celestial body as matter is related [to form] and, therefore, cannot [actually] exist without it[a], as prime matter cannot [actually exist] detached from forms [235]. The existence of the celestial body, in turn, depends on these [elements] in the way forms depend on matter.

We have said that a thing is produced from something else which is q52
the same in species and quiddity. This is more evident in things [produced] by art than in natural things, for the convalescence which emerges in human bodies through the art of healing emerges from the form of convalescence which is in the soul [of the physician], and similarly the form of the house built[b] by an architect of stones and bricks necessarily comes from the form which is in the soul of the [architect] [236]. However, since this form necessarily unites a plurality of acts (for in order that there be convalescence, it is necessary that there has been purgation, and in order that there be purgation, a purgative must have been taken), necessarily that among them which is prior in the soul of him who practises the art is chronologically posterior in coming to be [237]. Therefore, one says that the first in thought is the last in action, while the first in action is the last in thought [238]. j73

With natural things it seems to be the same: their most remote principle is intellectual conceptualization. From where else could it come about that it lies in their nature to be appropriate for being thought by us? For this is essential to them and found in their nature; and that which is essential to an existent is necessarily established in it by some a49
efficient cause. Yet, there is nothing whereby a sensible thing could become potentially intelligible, that is [whereby it adopts] its nature of being a [potential] object of thought, except that its coming to be [originates] from intellectual conceptualization, even if its being a [potential] object of sensation [originates] from its sensory principles. Like-

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a Reading, with mss. *H, Q,* and *M*, *an tūjada dūnahū*. The remaining manuscripts have *an yūjada dūnahū*, which obviously makes no sense. Quirós (transl., p. 81), Horten (p. 59), and Van den Bergh (p. 41) read *an yūjada dūnahā* as a basis for their translations, which makes the following sentence a tautology.

b Reading *alladhī yaṣnaʿuhū* instead of *alladhī yaḍaʿuhū* in ms. *H* and *alladhī yaṣnaʿuhā* in the remaining manuscripts.

wise for things [produced] by art, since the water-clock[a] is intelligible to him who has not produced it solely due [to the fact] that it is something originating from an intellect, namely [from] the form which was in the soul of him who produced [it]. Otherwise it would be intelligible [merely] by accident (and this [holds] likewise [good] of nature and natural things).

q53 From this it is in general evident that there exist separate forms which are the cause of the intelligibility of sensible substances. Yet [such] substantial forms through which sensible things become potentially intelligible are given to sensible things only by means of nature and the celestial bodies, [i.e.] these forms are forms of the celestial bodies[b]. This is exactly the meaning [of 'separate forms'] those who taught [the existence of] Ideas wished to rule out [239].

But we have digressed from our topic proper. So, let us return to where we were. We say: If it is evident that that which comes to be comes to be only from that which is one and the same in species and
m368r quiddity, as stated above, then it is clear that the quiddity *qua* quiddity is not coming to be and transient[c], and the same [holds true] for matter, for it is not brought into being by him who produces [that which comes to be] [241]. And if this is the case, it will be the individual [thing] combined from these two that comes to be and corrupts, that is that which is different in number from that which makes it come to be, but one and the same in form.

Taking this for granted, it is clear[d] that form and matter *qua* form and matter are neither coming to be nor transient, except accidentally. Form

a Reading, with mss. *H* and *Q*, *li-l-minqāna*. The other manuscripts display either undotted or foolishly dotted versions (adopted by Jihāmī, replaced by *li-l-ṣināʿa* by Amīn). Cf. ed. Quirós' translation, p. 82, note 1.

b The Arabic text corresponding to 'by means ... celestial bodies' is omitted in ms. *H*, secluded by Amīn (p. 49, note 5), and ignored in the translations by Horten and Van den Bergh.

c From here on up to p. 69, l. 19 ('that he gives the form to it'), the text as transmitted in the manuscripts is heavily confused through omissions, misplaced interpolations of marginal additions as well as doublets (the section in question concerns Quirós, p. 53, l. 9 – p. 54, l. 10, Amīn, p. 49, l. 12 – p. 50, l. 3, Jihāmī, p. 73, l. 19 – p. 74, l. 20). The reconstructed Arabic text on which the translation is based, can be found in note [240].

d Reading, with mss. *H* and M^{marg}, *fa-bayyinun*. Ms. *M* has *fa-qad tabayyana*, the remaining mss. *fa-huwa bayyinun*.

is transient and coming to be and, in general, changeable only in so far as it is part of that which comes to be and is transient by [its] essence, that is [of] the individual [thing] in which matter and form *qua* form of a concrete thing[a] (not *qua* form as such) come together. The same [holds good] for matter, for it is susceptible of change only in so far it is part a50
of that which is changeable, that is [of] the concrete [things], but not in so far it is matter as such. Now, if matter is in this way a cause of j74 q54
change [this change being] bound to forms, then all the more so form. But matter is not intelligible in so far it is matter [as such] [242], for a thing receives intelligibility only in so far it is in actuality. On the contrary, [matter] is intelligible, as a rule, either[b] by analogy (this is [the case] with prime matter) [243] or in so far as it comes to have a certain actuality [attached to it][c] (this [is the case] in matters specific to this or that existent).

That matter is not produced by him who produces [that which comes to be] is as evident as it is [in the case of] form as such[d]. For he only produces that in which matter and form are united because[e] he produces that which has a form simply by changing the material in such a way that he gives the form to it [244]. E.g., he who produces a cupboard neither produces the wood nor the form of cupboards [as such], but only the form of this particular cupboard [made] of this particular [piece of] wood. If [the form he produces] were form *qua* form and if the matter were susceptible to coming to be and corruption, then coming to be[f] would be from nothing absolutely, and corruption would be into nothing absolutely. Let us suppose, for example, that body *qua* j75
body comes to be. [This] will necessarily entail that it comes to be from

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a *Bi-mā hiya ṣūratun li-shayʾin mushārun ilayhi* ms. *M*, similarly *min ḥaythu hiya ṣūratu shayʾin mushārun ilayhi* mss. *A* and D^{marg}, omitted in the remaining manuscripts.

b Reading *immā* instead of *innamā* ('only') in mss. *A* and *M*, omitted in the remaining manuscripts.

c Reading, with mss. *A* and D^{marg}, *anna fiʿlan mā* , instead of *al-fiʿl* in ms. *M*. The section is omitted in the remaining manuscripts.

d *Al-ṣūratu l-muṭlaqa* mss. *M*, D^{marg}, and I. Mantino; *al-muṭlaqa* is omitted in the remaining manuscripts.

e Reading, with mss. *H* and *M*, *li-annahū* instead of *aʿnī annahū* ('I mean that') of the remaining manuscripts.

f Reading *al-takawwun*. Mss. *D, H*, and *M* read *al-kawn*, the remaining manuscripts *al-mukawwin*.

that which is absolutely incorporeal. Yet, coming to be and corruption [occur] only in that which is combined from these two, i.e., matter and form. From this it becomes plain that that which makes an individual [thing] come to be is certainly an individual [thing], since[a] that which changes the material is an individual [thing].

Furthermore, it is evident that[b] definitions are not subject to coming to be and corruption, even if the definiendum is generated and corruptible [245], as well as how this applies to them. Furthermore, [it is clear]
a51 that this does not [entail] the necessity to teach the [existence of] Ideas (for it is this observation that moved those who taught the [existence of] Ideas to establish [the doctrine of] Ideas). To explain this, the [philosophers] before Plato maintained that knowledge is nothing but knowledge of sensible things. Since they taught that sensible things are
q55 changeable and unstable, they [thus] denied [the possibility of] knowledge absolutely. [This] got to the point that some ancients being asked about a [certain] thing [merely] pointed with the finger at it thus indicating that it is unstable and not remaining the same and that [all] things are continuously in change and that nothing has any real nature at all [246].

In general, the doctrines emerging from this [view] were sophistical. In the time of Socrates, [philosophers] maintained that there are eternal and universal intelligibles and taught that they exist outside the soul in the same way as they exist in the soul, yet simultaneously they maintained that these [intelligibles] are the principles of sensible substance. It is, however, clear from what we said [before] that, even if these [intelligibles] existed in the way they claim, they would be of no use at all for the existence of that which comes to be, because that which makes a particular [thing] come to be is certainly another particular [thing] of the same species or similar [to it] in the way [explained] above.

m368v Themistius argues in favour of Plato that forms do bring about the existence of animals generated from putrefaction. He seems to believe that a principle of this kind has been acknowledged by Aristotle and

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a Reading, with mss. *H, M, P, R*, and I. Mantino, *idh*. The remaining manuscripts have *idhā* ('if').

b Reading, with mss. *H* and I. Mantino, *wa-yaẓharu ayḍan an*. Ms. *M* has *fa-qad ẓahara ayḍan an* ('Furthermore, it has already become evident that'). The remaining manuscripts omit either *ayḍan* or *ayḍan an*.

that, according to what he believed to be [Aristotle's doctrine] in the *Book of Animals*, the need to introduce this [kind of principle] as cause of coming to be is evident not only with respect to this genus of animals but also with respect to animals reproducing sexually [247].[a]

This whole [part] of Aristotle's doctrine is a matter of dispute.

However, according to Aristotle the proximate principle of these [animals] is psychic potency, while the remote [principle] consists in the forms of the celestial bodies.

It is indeed far-fetched [to ascribe to] Aristotle the opinion that these separate forms have a general effect on all that comes to be without an intermediary[b], as maintained by Ibn Sīnā [248]. On the contrary, [what] he thought [was] that with respect to some natural existents one must introduce separate forms for [a sufficient explanation of] the coming to be of the individual (as was his opinion on animals, especially those who reproduce asexually), while this is not evident with respect to others, in which case this [assumption] is not necessary as far as their coming to be is concerned [249]. But when he considers generated forms in so far as they happen to become objects of thought and, in general, to have a [certain] order[c] [250], it becomes evident that from this point of view these [separate] forms have to be introduced with respect to all things, as we have explained before. However, this principle is not of the kind postulated by those who teach the [existence of] Ideas. For they maintained that the intelligible object 'horse' and the quiddity of horse in so far it is in matter are one and the same outside the soul.

a52 j76 q56

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a The following sentence is again transmitted in two versions. In the left column I give a translation of the version of ms. *H (wa-fī hādhā kullihī min madhhabi Arisṭū nazar)*, which in all likelihood is the earlier version. The right column displays the version of the remaining mss. (except *M*) *(lākinna l-mabdaʾa l-qarība fī hādhihī ʿinda Arisṭū huwa* [sic leg. pro *hiya*] *l-quwwatu l-nafsāniyyatu wa-l-baʿīda huwa ṣuwaru l-ajsāmi l-samāwiyya)*. Ms. *M* and I. Mantino have first the later version, then also the earlier version.

b *Bi-ghayri wāsiṭa* omitted in ms. *H* and in the translations by Horten and Van den Bergh.

c *Dhāta nizām* in all testimonies including I. Mantino, except *H* and *M*. Ms. *H* has *bi-ṣifatin mushtaraka* ('to have a common characteristic') which possibly represents again an earlier version (however, the meaning is not clear). Ms. *M* contaminates the variants; cf. also note 250.

Consequently, they would have to admit that there is a neighing horse and a burning fire in the [realm of] immateriality. If this is what they mean, they err completely. And if they refer [with their doctrine] to the sense in which Aristotle speaks of the existence of separate things (as is the view of him who sides with them), they err [also] by taking scientific propositions as if they were mythical propositions[a] employed for the instruction of the masses [251], as will be shown later.

It has become clear from this discussion that universals, even if they exist as self-constituted [entities] outside the soul, are of no use for cognizance, nor for coming-to-be, since essential coming-to-be is only in that which[b] is individual and particular. As for that which is common
a53 [252], which evidently comes to be accidentally (I mean, in so far as it is in the individual [thing]), the cause for its coming-to-be seems to be nature. The cause of [the fact that] nature acts like an intellective [power] is the movements of the celestial bodies; and the cause of [the fact that] the movements of the celestial bodies supply this nature with this power is the separate intelligible forms.

Therefore, Aristotle blames Plato simply because he considers as an essential (i.e., proximate) efficient principle of the generated thing that which is [in fact] accidentally[c] an efficient principle of the generated
q57 thing. The difference between the two doctrines should be understood in this way, [i.e.] not [in the way] that[d] Aristotle denies here generally the [idea] that separate forms are efficient principles. Rather, [he just denies that they are] in the above-mentioned way in the particulars for which they are universals. For this is the sense in which universals are

a Reading, with mss. *D* and *M*, *al-aqāwīl al-lughziyya*. Ms. *H* is hardly legible, but looks like *al-aqāwīl al-lughawiyya*. The remaining mss. have either *al-aqāwīl al-shiʿriyya*, obviously a misreading of the rare term *lughziyya*, or a combination of both. Cf. also *Long Commentary on the Metaphysics*, p. 1688 sq., where the identification of celestial forms *(ṣuwar falakiyya)* with celestial living beings is classified as myth *(lughz)*.

b Reading, with mss. *Q, T*, and I. Mantino, *li-l-amr* instead of *al-amr* in the remaining manuscripts.

c Ms. *H* adds *ay baʿīdan* ('i.e., in a remote [way]'). Quirós and Amīn adopt this reading which is not confirmed by any other Arabic manuscript nor by I. Mantino.

d Reading, with mss. *H, M*, and I. Mantino, *lā anna* instead of *illā anna* ('except that') of the remaining manuscripts (adopted by Jihāmī) Amīn follows Qabbānī's emendation *li-anna* ('because').

distinct from Platonic Ideas[a]. Accordingly, there is in [the field of] natural things no need to introduce separate forms in [order to explain the existence of] whatever generated thing, with the exception of the human intellect [253]. This is the true [meaning] of Aristotle's doctrine[b], and this has to be preferred. It is thus clear that universal forms are neither coming to be nor transient except by accident. j77

as we have already shown in [our] commentary on Aristotle's treatises on this science [254].

Having settled this, we have to consider whether or not it is possible that universals are of such a kind, I mean whether[c] they can exist as self-constituted [entities] outside the soul in the particular things[d], so that they deserve the name 'substance' with respect to their sensible substances [255]. We say: If one assumes that these universals exist a54 outside the soul in the same way as they [exist] in the soul, this might be understood in two [ways]. m369r

[(A)] Either they are self-constituted and absolutely unrelated to individual sensible [things]. This would contradict that which is accepted as their definition, since universal, as one says, is that whose nature consists in being predicated of many [things]. It follows, thus, from this assumption that the intelligible of a thing is not [the same as] the thing, which is altogether impossible.

[(B)] Or we say that a universal is something which exists outside the soul in the individual [thing]. However, if we suppose this to be the case, it easily becomes evident that this assumption entails objectionable absurd consequences. For if we take as hypothesis that a [uni- q58

a The section corresponding with 'in the particulars...' up to 'Platonic Ideas' is omitted in ms. *H*, I. Mantino, and in the translations by Horten and Van den Bergh.

b The following clause is again transmitted in two versions. While all manuscript except ms. *M* and I. Mantino contain solely the late, revised version (printed in Jihāmī, p. 77, l. 2 sq., Amīn, p. 53, l. 12, translated here in the right column), we find in ms. *M* and I. Mantino first the original version (printed in Quirós, p. 57, l. 8 sq., translated in the left column) followed by the revised version.

c Reading, with ms. *H* and I. Mantino, *aʿnī hal* instead of *aʿnī mā* in ms. *M* and *aʿnī mithla mā* in the remaining manuscripts.

d The Arabic text corresponding to 'in the particular things' is omitted in mss. *H, M*, and I. Mantino and, thus, also in the editions by Quirós and Amīn as well as in the three previous modern translations.

versal] exists outside the soul in the individual [things] of which it is [the universal], it must be common to these individuals in one of the [following] two ways: [(a)] Either a part of it is in each single individual. Then there would be only a part of the meaning of 'humanity' in Zayd, and another part in ʿAmr, and, consequently, 'humanity' would not be predicable of either of the two by essential predication referring to the quiddity. For that which has [only] a part of being-man is not man. That this is preposterous is self-evident. [(b)] Or the universal exists as a whole in each single individual of which it is [the universal]. Yet this assumption is self-contradictory, for [(i)] either it necessarily entails [the consequence] that the universal is a multiplicity in itself,
j78 with the result that the universal which makes known the quiddity of Zayd is different from the one which makes known the quiddity of ʿAmr. Hence, that which is intelligible in both cases would not be one [and the same], which is preposterous. [(ii)] Or it is one and the same existing as a whole in a plurality of things, nay, not only in a plurality but in an infinite [number of things] some of which are coming to be,
a55 while others are transient. But then it would be coming to be, transient, one and many in one [and the same] respect, and that is absurd. It would necessarily follow that contraries existed simultaneously in it, since many universals are subdivided by contrary differentiae, and that[a] [the universal] would exist [simultaneously] in contrary places [256].

Moreover, if we take for granted that the [universal] is found in many things in the way one can conceive the one as existing in a multiplicity, that is as being a concrete numerical one existing in many things (such as the form of the whole in [its] parts)[b], then it will follow from this that man is combined from donkey, horse, and any other species which fall under this [universal], and that all [species] would have to be connected with one another or intermeshed or contiguous
q59 [257]. Furthermore, if we suppose that universals exist outside the soul, there would have to exist other universals for them outside the soul through which these first universals become intelligible, then for the second [universals] again third [universals], and so on ad infinitum [258].

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a Reading, with the majority of the manuscripts, *wa-an*. Ms. *H* has *bi-an* ('through [the fact] that', 'in so far as'), adopted by Amīn, ms. *A* has *in* or *an* ('if', or 'that'), I. Mantino (fol. 369rb) has simply *et*.

b The parentheses is omitted in mss. *H* and *M*, hence also in the three previous modern translations.

We are not faced with this problem when we assume that universals exist [only] in the mind, for that through which the universals [become] universal is, as has been shown in the book *On the Soul* [259], a separate substance and one and the same [for all universals], I mean the intelligible of the intelligibles [260].

Also, how can the universal be a substance and something self-constituted as they maintain, while it belongs to that which is in a substrate, yet without being [predicated] of a substrate? This is clearly, how it has to be defined; and what is like this is necessarily an accident [261]. Furthermore, if we take this [doctrine of theirs] for granted, there would be no longer any specific substance of what thing soever, but rather the substances of things would be something common, and the specific substance would be a kind of substrate of an [alleged] general substance [262].

All these absurdities result from our assumption that these universals a56
are self-constituted [entities] outside the soul. However, if we do not suppose that universals are of such a disposition, somebody might
argue that [universals] are not true [at all], but rather mere deceitful j79
inventions, since the true, as it has been defined in the *Book of Demonstration*, is that which is found in the mind in the same way as it is
[found] outside the mind [263]. Many theologians of the recent past m369v
adopted this [alleged] aporia and transformed exactly these words into a refutation of the existence of universals; and from this it does not even follow with respect to their assertions that knowledge [as such] becomes impossible, since they are not supporting syllogisms composed of premises or essential predication anyway [264]. We shall reply to them and to others on this [issue] in [the chapter on] the verification of the principles of the discipline of logic and of the other departmental disciplines [265].

As for the doubt arising in this [context] with respect to the existence q60
of universals, this can be solved immediately. We say: Even though the false might consist in [the fact] that something is not in the same way in the mind as it is outside the mind, as is comprehensible from the inversion of the definition of the true, this (I mean [the statement that] something is not in the same way in the mind as it is outside the mind) nevertheless can be conceptualized in [various] ways. [(i)] The thing [in question] exists only in so far it is in the mind and has no existence at all outside the mind. In this case it would clearly fall under or be included in the definition of the false. [(ii)] The thing [in question]

exists outside the mind, but the disposition in which it is taken up in the mind is different from its [disposition] outside the mind. This can again be conceptualized in two [different] ways[a].

a57 [(a)] Firstly, the disposition it adopts in the mind is [a result] of the combination of the corresponding subjects outside the mind, but the mutual relation between the things [combined in the mind] is different from that [between the things] taken by themselves. This is also unquestionably a [case of] falsehood and included in the definition of the j80 false, such as [in the case of] the goat-stag or the concept of the void or other similar things combined in the mind from things which exist outside the mind in a different mode of combination.

[(b)] Secondly, there are things outside the mind which are essentially distinct, yet inhering in one another or mixed with one another. Then, the mind distinguishes their essences from one another, puts together what is mutually similar, and discriminates it from what is distinct, until it thinks the natures of the things separately and in accordance with their true being. And this is by no means false and does q61 not fall under the definition of the false. This is how we abstract the [notion of the] point from the line, in order to think it [separately], although the point only exists in the line, and [how we abstract] line from surface, and surface from body. In general, this is how we become able to think all things existing in something else by themselves, no matter whether they are accidents or forms.

However, [we have to differentiate:] if the mind abstracts a plurality of these essences and distinguishes them from one another, and these [essences] happen to be of such a nature that they exist primarily in something else, it thinks them together with these underlying things, as is the case with material forms (for these are objects of thought only in so far as they are material) [266]. But if these essences pertain to that which does not exist primarily in something else, but rather are of such a kind that this [kind of existence] belongs to their concomitants (as is the case with the line), [then the mind] thinks it as essentially separate [from matter].

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a The Arabic text corresponding to ‘in [various] ways (p. 75, l. 36) ...’ up to ‘in two [different]’ is omitted by homoioteleuton in ms. *H* and in the translations by Horten and Van den Bergh.

This activity is specific to the rational faculty [of the soul] as has been shown in the book *On the Soul* [267]. For the senses perceive forms only in so far as they are individual and, in general, in so far as a58
they are [forms] in matter and concrete [things], although they do not receive them in the material way in which they exist outside the soul, but rather in a more incorporeal mode as has been shown there [268]. The intellect, on the other hand, is capable of abstracting the form from the concrete material [thing] and of conceptualizing it separately in accordance with its true being. That this is so, is clear, and it confirms j81
[the fact] that [the intellect] thinks the quiddities of things. Otherwise, there would be no knowledge at all.

Hence, if one defines the false as that whose extramental existence is m370r
different from its existence in the mind, [this definition] does not include this meaning [of the universal]. Likewise, the definition of the true does not weaken [the doctrine that] this is how the universal exists. For the expressions used in the two definitions belong to [the class of] q62
equivocal terms (I mean, if we say in the definition of the false that [that which] is outside the mind is different from that which is in the mind, and in the definition of the true that it is that which exists in the mind in the same disposition as it exists outside the mind) [269].

Somebody might doubt whether the universal is of this kind, saying that universals must be accidents, if we suppose them to be mental things, and [raising the question] how they can make known the self-constituted substances of concrete things, when they are [mere] accidents, having said that that which makes known the quiddity of a substance is substance. However, this doubt is easily dispelled. For when the intellect abstracts these forms from matter and thinks their substances according to their true being, these forms, no matter whether they are substantial or accidental, adopt in that state in the mind the meaning of universals. [This does] not [mean] that the universal is itself the form of these essences. For that reason, universals are second intentions, while the things of which they are accidents are first intentions (the a59
difference between first and second intentions has been stated in detail in the discipline of logic [270]). All this is self-evident for those who practise this discipline.

Having shown that universals are not the substances of sensible things, we shall now consider what their substance is. We say: That sensible things, i.e. individual substances, are combined from more

than one thing becomes evident from [the fact] that the method of inquiry we use for them is that of [asking] 'why'. This method of
j82 inquiry is not used for that which is simple, for one would not ask why the man is man, since the meaning of the subject is the same as that of
q63 the predicate [271]. The question 'why' is appropriate only with respect to combined [things], as when we say 'why is the man a physician?' to which one might reply 'because he is a rational being'. In that case the answer states the form of the thing, in others it might state its matter, as when we say 'why is this endowed with sensation?' and answer 'because it is composed of flesh and bones'. In general, each of the four [kinds of] causes can be stated in answers to [the question] 'why is...?'.

Now, if this is the case, it is completely evident that individual substances are composed and that there is potentially a certain multiplicity in them, even though they are one in actuality. This [is so] because they are not one by connection or contiguity as is the case with many things [produced] by art, but rather [inasmuch as] it is impossible that the elements of a thing exist in that very thing in actuality. Otherwise, that which is composed of elements would be the same as the elements
a60 themselves, e.g. if vinegar and honey were in actuality in oxymel, which is composed of them, oxymel would be nothing else than vinegar and honey. Likewise, water, fire, air, and earth do not exist by themselves [in actuality] in flesh and bones. Otherwise, flesh and bones would be [nothing else than] water, fire, earth, and air [272].

From this it becomes clear that in that which comes to be there is something else, apart from [its] elements, through which it is what it is. Otherwise, it would be exactly the same as that of which it is composed. Or else, we [would have to] say that there is flesh and bones in actuality in fire, air, and water, but then, in general, [we would have to assume] an infinite number of things [273], which would lead us to the [so-called] doctrine of mixture [274]. Moreover, if what is composed is distinct from [its] elements by virtue of something additional, this must
m370v be either [itself] an element or [composed] of elements. Yet, if it is an element, the same thing will again follow, I mean that which is composed of this [element] and of the elements which are prior to it will
j83 again [have to] be distinct from this [and the other elements] by [an-
q64 other] element, and so on ad infinitum, with the consequence that there will exist in one thing in actuality an infinite number of elements. And if [that which is additional] is itself [composed] of elements, there must

again be[a] something [else] by which it is distinct from the elements of which it is composed. If this is also [composed] of elements, this goes on ad infinitum. It is, thus, plain from this discussion that in that which is composed there is a substance which is different from the substrate, and this is called 'form'.

As has been shown in the discipline of logic, definitions are always composed of genus and differentia. [Furthermore,] it has become clear from the preceding [section] that [genus and differentia] *qua* universals have no extramental existence, and [that] they are by no means causes of the definienda. Hence, it is clear that the genus is nothing else than that which represents [in the definition] the general form of the definiendum which exists as its matter [275], since this, I mean to be a61
common, is the nature of matter. It is, in general, something that is accidental to the general form of a thing, just as the universal is accidental to the intelligible of a thing. Likewise, it becomes clear by analogy that the differentia is concomitant to the intelligible of something's specific form in so far this [form] is in the mind, and that it is, in general, that which represents the form just as the genus represents the matter [276].

From this it becomes clear [how] definition is related to the definiendum; and a number of possible doubts about [definition] can be solved. Many ancient [philosophers], for example, raised such a doubt concerning [definition] by asking 'how is it [possible] that living being, which we use, to give an example, in the definition of man, is more general than man, even though it is part of [man]?' [277]. A similar doubt concerns [the question] how it is possible to predicate the genus[b] in a quidditative mode of the species [278]. All these [difficulties] arose for them only because they did not differentiate between the two modes of existence, I mean existence in the mind and extramental q65
existence. In other words, their doubts arose as it happens when one carelessly speaks about things [only] in one way, [not realizing] there j84
are many.

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a Reading, with mss. *H, M*, and I. Mantino, *fa-hunā* instead of *fa-fī hādhā* of the remaining mss.

b All Arabic manuscripts read *yuḥmala l-juzʾ* ('to predicate the part') which, as far as I see, makes absolutely no sense. I therefore follow the *alia lectio* noted in the margin of I. Mantino (fol. 370 va ult.) which translates the reading *yuḥmala l-jins*; cf. note 278.

If this is the case and it is plain how genus and differentia relate to the parts of the definiendum, it is clear that the parts of the concrete substance are nothing else than sensible matter and sensible form[a], a62 which we originally wanted to show. We thus shall consider [the question] what forms of sensible things as such are (I mean the differentiae of first matter), and what their matters are, since it has already become clear that [sensible thing] as a total is definable [279], and that definitions are composed of genus and differentia representing form and matter [of the definiendum][b].

We say: Matter is that which is in potentiality that which will be in actuality † ... † {and} the definition[c], form is actuality and quiddity, and the concrete sensible is composed of these two. As for matter, there is general consensus among the ancients. In addition, it is immediately evident from what has been said in the natural sciences that in all four [types of] change (which are coming-to-be and corruption, growth and diminution, locomotion, and alteration) there [must] be a substrate in which the change occurs, for in so far as change is an accident, it is plain that it is among the things that need a substrate [280]. Therefore, we do not encounter change in what is not subject to change. However, [we have to differentiate:] things which are subject to substantial q66 change are necessarily subject to the remaining [types of] change, while m371r those which are subject to the remaining [types of] change are not necessarily subject to change in substance, as has been shown, for example, in the natural sciences with respect to locomotion in the case of celestial bodies [281]. But as stated above, there is general consensus

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a *Wa-l-sūrati l-maḥsūsa*, omitted in Quirós and Amīn. At this point ms. *M* adds: 'The same holds good of accidents as far as it is their nature to be definable and to have a sensible form'; cf. Quirós, p. 65, l. 6–8. The addition seems to be out of place and is not supported by any other manuscript, nor by the *Metaphysics* itself or by Ibn Rushd's *Long Commentary on the Metaphysics*.

b Ms. *M* and I. Mantino add: 'no matter whether they are substances or accidents'; cf. Quirós, p. 65, l. 12 sq.

c In the manuscripts we read *ammā l-māddatu fa-hiya l-shayʾu lladhī huwa bi-l-quwwati l-shayʾu lladhī sa-yakūnu bi-l-fiʿli wa-l-ḥadd* (+ *wa-l-ṣūra* ms. *M* and I. Mantino). After *bi-l-fiʿli* ('in actuality') a phrase like *al-mushāra ilayhi lladhī yadullu ʿalayhi* ('the concrete thing which is signified by') must have dropped out. The *wa-* ('and') before *al-ḥadd* has been added by a copyist in order to compensate this omission; cf. also *Long Commentary on the Metaphysics*, p. 1028, l. 10–16.

about the fact that matter is substance, while there is a controversy about its quiddity, I mean prime matter. This issue has already been clarified in the natural sciences [282], and in what follows we will [also] clarify the differentiae of [matter].

As for form which is actuality, this is what we will have to discuss a63
first and [of which] we will state the general differentiae by which it is j85
divided *qua* form. We say: Aristotle reports that one of the ancients, namely Democritus, reduced the differentiae of things to no more than three genera: firstly shape, secondly position, and thirdly order [283]. Apart from [the fact] that this doctrine is not exhaustive with respect to the forms of the sensible things, I mean those which are employed in their definitions, it leaves out of consideration what is most appropriate to be called 'differentia', namely the substantial differentiae whose order has been explained in the natural sciences [284].

In any case, it is generally evident that there are many substantial differentiae of things, and that there are those which are found in the substance and others which are found in quantity or in quality, and so, in general, in each of the ten categories. For often it happens that the natural differentiae of substances are not visible, and then the specific accidents replace them [in our apprehension] as differentiae, as [in the case of] shape, position, and order and other such accidents. Hence, [even] if one understands this [latter] meaning [of 'differentia'] as [the one] referred to by Democritus when determining the differentiae of substances as those three [genera], he is not beyond reproach, since we can see many substances whose differentiae are [constituted] by other than these [three accidental] things, such as substances whose differen- q67
tiae are [constituted] by heat or cold or other such accidents. Also [many] differentiae of things [produced] by art are accidents[a].

Now, since things are composed of form and matter, the most correct a64
definitions are those which connect these two. For he who defines house as being bricks and wood, states [what is] house only in poten- j86
tiality, and likewise he who defines it as that which provides shelter and protection for that which is in it, or [as that] which has such and such a shape, states no more than its form, yet this not with respect to its true being in which [the form actually] exists (for it has no existence

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a The last sentence is omitted by homoioteleuton in ms. *H* and not taken into account by Horten and Van den Bergh.

except in matter). In short, he states only one part of the definition of house, not all its constitutive parts. On the other hand, he who connects these two things in the definition stating that [house] is bricks and stones combined in a such and such a way and[a] arranged for such and such [a purpose], states all things, those which constitute [house] as protecting [facility] as well as the way in which it is constituted [285].

However, somebody might express doubt about this saying 'assuming we take this for granted as far as it concerns definitions of things whose matter is sensible, then what about things in the definition of which there occurs no sensible matter, such as the definitions of triangle or circle?' [286]. This difficulty can be solved by [considering] that although these things do not have sensible matter (this is why we said that they are not taken into consideration in so far they are in matter), there is nevertheless something in them which is related to them as sensible matter is related to natural form. E.g., we say that circle is a figure encompassed by a single line with a point in its interior [such that] all lines drawn from this [point] to the encompassing line have equal [length]. In this definition, what we refer to by
m371v 'figure' and by 'encompassed by a single line' functions as genus, and
q68 the remaining [part of the] proposition functions as differentia. These [merely] imagined matters are related to sensible matters in such a way
a65 that the former exist potentially in the circle which is how sensible matters of things exist in sensible things. We will clarify this below when we explain in which way the parts of definition exist in the definiendum and how the definiendum is one, while definition includes various parts [287].

If all this is the case and it is clear that sensible substance is threefold, matter, form, and the union of both, one might raise the following question: if sensible substances are composed of matter and form, which of the [following] two is signified by the name, is it the form or
j87 the union of these two[b] ? Obviously, the most wide-spread meaning of

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a Reading, with ms. *M* and I. Mantino, *wa-* instead of *aw* ('or') of the remaining manuscripts.

b The translation follows ms. *H* reading *hal ʿalā l-ṣūrati awi l-mujtamaʿi minhumā*. All other testimonies (including I. Mantino) read instead of 'is it the form' 'is it the form or the matter' (or vice versa), which can be ruled out for three reasons: 1. the preceding clause introduces a twofold alternative, not a threefold. 2. This twofold alternative corresponds exactly with *Metaph.* VIII

the name refers only to the union of both, even though it is sometimes predicated of the form, sometimes of the union of both. However, the latter is predicated only *secundum prius et posterius*, since that which is combined has no existence *qua* combined [entity] except through form, and it is [form] to what the name goes most appropriately. Hence, if we compare these two [modes of] signification, [we see that] the one which [refers] to that which is combined is prior in time and posterior in being, while that which [refers] to form is posterior in time and prior in being. At the same time [we have to admit that] it is not the task of the masses to apply such a distinction to the individual substances[a].

We must not fail to notice that these things have two [modes of] existence, as stated frequently, [namely] a sensible existence and an intelligible existence, and that intelligible existence is sensible existence in so far [the sensible] is known to us and [in so far] we grasp its quiddity. In this sense we say that the intelligible of a thing is the thing [itself]. On the other hand, it is absurd [to maintain] that the intelligible existence is [identical with] the sensible existence in such a way that the sensible [thing] is composed of or essentially produced by intelligible [things], as in the view of those who teach the [existence of] Ideas, or that it is identical with it in any respect whatsoever. For if we assume that the intelligible of a thing is identical with it in any respect, the intelligible form of that which is composed will be the composed thing itself, hence man will be [identical with] soul [288]. And if we assume that sensible substances are composed of intelligible substances, this entails likewise [an absurd consequence, namely] that sensible things are not subject to coming-to-be and corruption, for this, as has been shown earlier, is a characteristic [not of sensible things, but] of form as such and matter as such (I mean being free of coming-to-be and q69 a66

(H) 3, 1043 a 29sq.: πότερον σημαίνει τὸ ὄνομα τὴν σύνθετον οὐσίαν ἢ τὴν ἐνέργειαν καὶ τὴν μορφήν. 3. Ibn Rushd nowhere deals with the option that the name might signify the matter only.

a Ms. *H* adds (without support by any other testimony): 'because they know only that which is combined and equate it with the name. The signification which [refers] to that which is combined is prior in time to the one which [refers] by this name to form because form is what is known last, while form is prior to that which is combined in being.'; cf. Quirós, p. 68, l. 20–23, Amīn, p. 65, l. 12–14 (where the ms. reads *fa-awfaqū* instead of *fa-awqaʿū*, as printed there).

corruption) [289]. Therefore, the changeable elements of substances [290]
j88 are by necessity changeable in an accidental way, not essentially, e.g. the natural forms are subject to coming-to-be and corruption not essentially, but rather in so far they form part of that which is essentially subject to coming-to-be and corruption, which is the individual, as shown above. As for [the question] whether some of the natural forms are separable, this has been clarified in the natural sciences [291].

Having stated that definition is a statement [composed] of parts, it is evident that only composite [things] can be defined, and that form and matter and, in general, simple things cannot be defined except by some-
q70 thing similar [to a definition] [292]. Furthermore, [it is evident] that they erred who maintained that definitions of separate forms are identical with definitions of things in matter, as well as those who maintained that the substances of things are numbers, since they would have to admit that numbers are not [mere] assemblages of monads, when they are definitions of things[a] and definition is [composed] of a plurality of parts which are not monads[b] [293]. Or else, we [would have to] say that
m372r sensible things are simple units, but then there would be no definition [of sensible things] at all. It is, however, evident that number must be in matter and that it has unity only due to form, and multiplicity due to matter, as shall be clarified below.

a67 To sum up, it has become evident that it is the nature of individual sensible [things] to be composed, as they have two clearly distinct modes of existence, namely sensible existence and intelligible existence. For it is impossible that they have these two [dispositions] from one and the same aspect [of theirs], but rather form is the cause of the thing's being intelligible and matter [the cause] of its being sensible.

Now that it is clear how many primary kinds of sensible forms there are, we should begin with [the inquiry into] the differentiae and kinds of material substance [294]. We say: There are four kinds of change: change in substance, in quantity, [in] quality, and [in] place[c]. That

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a Reading *idhā kānat* [scil. *al-aʿdād*] *li-l-ashyāʾi ḥudūdan* instead of *idh kāna li-l-ashyāʾi ḥudūdun* ('since there are definitions of things') which contributes in no way to the present argument of Ibn Rushd; cf. note 293.

b The phrase 'which are not monads' is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

c Literally 'in the where' *(fī ... al-ayn)*, here and in the following translated by 'in place'.

which is subject to change in place it not necessarily subject to change in substance, quantity, or quality. It is, thus, clear that the [material] substrate of change in substance can be different from that of the remaining [kinds of] change, and especially from [that of] change in j89 place [295]. Therefore, we obviously speak of matter with respect to celestial bodies and bodies subject to coming-to-be and corruption in an equivocal way.

If this is the case, two kinds of matter [have to be kept apart]: one kind which is the substrate of change in substance (this is what is called q71 'matter' properly), and one kind which is the substrate of all other [kinds of] change (this is what is most properly called 'substrate'). However, the celestial bodies, as a special case[a], must have simple matters different from that which is combined of matter and form, for the only [kind of] change found in them is [change] in place [296]. Change in substance, on the other hand, requires that the thing is composed of matter and material form[b].

As for change *qua* change, it has been shown in the general statements of natural science [297] that it can occur only in that which is a68 divisible. A thing is divisible only in so far it has matter, not in so far it has form[c], since form is divisible only accidentally. Some things changeable in substance have one common matter, as is the case with simple bodies which have prime matter in common. What characterizes this kind [of changeable things] is [the fact] that each of them has the potency to be changed in a reciprocal way into its mutual opposite (e.g. air has the potency to be changed into water just as water has the potency of being changed into air). Other things changeable [in substance] have different matters, such as phlegm the matter of which is fat, or yellow bile the matters of which are bitter substances[d] [298]. What

a *Anfusihā* (lit. 'themselves', 'by their individuality'), omitted in ms. *H* and I. Mantino, seems to emphasize the exceptional case of matter *qua* principle of the potency of locomotion in the celestial bodies. Cf. also below, p. 93 sq.

b The last sentence is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

c The translation follows the wording of mss. *H, M*^{marg} and I. Mantino. The remaining manuscripts read *min ḥaythu huwa jismun lā min ḥaythu huwa murakkabun min ṣūratin wa-mādda* ('in so far it is body, not in so far it is composed of form and matter').

d Reading, with mss. *H, M*, and I. Mantino *al-ashyāʾu l-murra* instead of *al-ashyāʾu l-ḥulwa* ('sweet substances') as transmitted in the remaining manu-

characterizes this kind [of changeable things] is [the fact] that not each of them is said to be in a reciprocal way potentially its mutual opposite[a]. Fat, for example, is potentially phlegm, but phlegm is not potentially fat in such a way that it might be changed into the matter of fat. Similarly, the living is potentially dead, but the dead is not potentially living in such a way that it might be changed into the matter of life [299].

q72 Therefore, not anything comes to be from anything at random, but rather [something comes to be] from the specific contrary which has the
j90 appropriate matter. As a consequence, things are distinct from one another not only by form but also by matter, and not only by these two
m372v but also by the efficient and final causes. From this it becomes abso-
a69 lutely plain that the four [types of] causes have to stand in the focus of the investigation of all natural things, and that this [investigation] must not be restricted to the remote causes but has to state the proximate cause, too [300].

That should be enough with respect to the principles and differentiae of sensible bodies [301]. As for [the difficulty] how [it is possible that] definitions have many parts while the definiendum is one, this becomes plain, if [we take into account] that the concrete [thing] is not composed of matter and form in such a way that either of these is in actuality in it (as is the case with things composed by art), but rather [in such a way that] matter exists in the composite in potentiality and form in actuality [302]. To say of [matter] that it is in potentiality in the individual doesn't mean the same as saying of it that is has potency with respect to such and such a form. But rather saying of [matter] that it is in potentiality in the individual means that form will be detached from it when this individual perishes, and [that] it is then actually distinct from the form after having been [distinct from it] potentially[b].

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scripts. The replacement of *al-murra* by *al-ḥulwa* is probably caused by the omission of *al-ḥulwa* in the preceding example (cf. *Metaph.* 1044 a 18 sq. οἷον φλέγματος [ἐστι πρώτη ὕλη] τὰ γλυκέα ἢ λιπαρά) and the subsequent misplaced interpolation of a marginal addition.

a Reading, with I. Mantino, *muqābiluhū* (thus also Quirós, p. 71, l. 21) instead of *muqābilatun* as transmitted in all Arabic manuscripts (adopted by Amīn and Jihāmī).

b The phrase 'after ... in potentiality' is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

Since genus is like matter, it also potentially exists in the definiendum [303]. Accordingly, there is no being-a-living-being [existing] separately in actuality but only being-a-living-being of such and such a kind, that is together with a differentia. The more remote genera are from the sensible forms, the more appropriate [it] is [to predicate of them] this [mode of] existence, I mean that they are in potentiality [304], q73
such as body [conceived as genus] of the individual concrete man. Hence, the only [genus] which has to be made explicit in definition is the proximate genus, since all [other] genera of a thing (providing it has a plurality of genera) are potentially included in this [305]. On the other a70
hand, when we state in a definition a remote genus (omitting the proximate [genus]), the proximate one is not included in it. Definitions of this type are, therefore, incomplete definitions.

The [kind of] existence which is apprehensible through the genera is intermediate between form in actuality and formless prime matter [306] and has, as stated, different levels in this respect. This is so because j91
genera are nothing else than that which makes composed matters apprehensible[a], [both] in so far as they are actually [in them] as well as in so far as they are potentially [in them]. Therefore [307], there are definitions of genera as well as of [their] last species [308], e.g. man [is defined as] that which is composed of rationality and living being, living being [as] that which is composed of sensible and nutritive [faculties], and so on, until one reaches finally the last genus which is the genus of things closest to prime matter (this is why there is no definition for this kind of genus as there is none for the last form, unless by imitating [a definition proper] [309]).

It is clear that in those cases where such genera are predicated univocally, the meaning which is made known by the genus is more completely instantiated in that which [belongs] to this genus than [in cases] where it is made known by genera predicated with respect to one thing [310], such as being or thing. Therefore, the latter can hardly be [classified as] genera, unless we use this term equivocally. The matters

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a Reading, with mss. *D* and *M*, *mufahhimāt al-mawādd al-murakkaba* instead of *mubhimāt al-mawādd al-murakkaba* ('that which makes composed matters obscure') as transmitted in most manuscripts. Ms. *H* and I. Mantino read *muḥākāt al-mawādd al-murakkaba* ('that which represents composed matters [in thought]').

made known[a] by genera are either sensible, such as the matters of nat-
q74 ural things (these are most properly called 'matters'), or imaginable [and] intelligible, such as the matters of mathematical objects [311]. For, even though there appear no sensible matters in their definitions, there is something in these [mathematical objects] that resembles matter, as
a71 [in the case of] the circle the genus of which is 'figure encompassed by a single line', and it is this what makes definitions of mathematical objects possible. From this it is [also] evident that mathematical [objects] are not separate [entities], for if triangles were separate, [their] figure would be separate previously, and if the figure, then also the line,
m373r and if the line, then also the point (but this will be shown later).

As for [the question] whether there are things lacking both sensible as well as intelligible matters, such [things] cannot be composed [of matter and form] and, thus, are without any definition. They have no potential existence, but rather are pure actuality, and the cause of their unity is not distinct from their essence; in short, their quiddity is identical with [their] being [312]. Through this [consideration] it becomes evident that they who taught the [existence of] Ideas erred, for they equated Ideas and sensible [things] with respect to quiddity and definition.

As for [the question] which parts of the definiendum are prior to it
j92 by definition and quiddity and which are posterior to it or to be more precise: which parts of the definiendum are those the definitions of which are included in its [own] definition [313], these are the formal parts, I mean the general form which is the genus, and the specific [form] which is the differentia. For the definitions of these things are necessarily required for the constitution of the definiendum, e.g. [considering] the definition of man as rational living being, we find that the definitions of living being and rational (being the [constitutive] parts of man) are prior to [man] (providing there is a definition of the differentia [314]); and similarly the figure which is a [constitutive] part of the
a72 circle must be prior to it. On the other hand, that which is part of a
q75 thing in so far as the individual has quantity due to its materiality, this is posterior in definition to the definiendum, e.g. the definition of the segment of a circle, which is posterior to the definition of circle, or

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a *Tufahhimuhā* in all mss. except *H, M*, and I. Mantino, which have *tuḥākīhā* ('represented').

similarly the definition of the acute angle being posterior to the definition of the right [angle], or the definition of the human hand or foot being posterior to the definition of man [315]. From this it becomes evident that they err who maintain that sensible bodies are [composed] of indivisible parts, no matter whether these are supposed to be finite or infinite [316].

Definitions of accidental matters seem to have the same relation to the material thing [itself] as definitions of [its] quantitative parts. Copper, wood, and stone, for example, may be [accidental] matters of the triangle or the circle and, in general, [quantitative] parts of them, yet [their definitions] are not definitions prior to triangle [317]. The definitions of the essential matters, on the other hand, are necessarily prior to the definiendum [318].

Having explained how [it is possible that] the definiendum is one, while the parts of the definition are many, and [having explained] the definitions of which parts of the definiendum are prior to it and which not, it becomes clear that those who taught an extramental existence of these universals could not find a solution for this difficulty. For they had to assume that man [as defined] is combined of many (and even contrary) things and, accordingly, have not been able to distinguish and j93
explain why certain parts of the definition are prior to the definiendum, a73
others posterior [319]. [Furthermore] its becomes clear what the ancients frequently sought [in vain] asking 'what is the cause of the connection of body and soul, and, more generally, of matter and form?'. As a matter of fact, there are no such causes besides the union of the potentiality and the actuality [of matter and form] and the efficient or moving cause through which the potentiality becomes actuality. For this reason, there is neither such composition [as sought by q76
them] in anything which has no matter, nor any moving [cause] [320].

We still have to consider the question we promised to investigate [earlier] [321], that is to examine which is the most general genus of substances, the usual answer to which is body or the corporeal. We say: Some [philosophers] made the three dimensions the first thing instilled in formless prime matter and the principles of a thing whereby matter receives form[a]. Furthermore, they maintained that the term 'body' sig- m373v

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a All manuscripts read *wa-annahā [*scil. *al-abʿāda l-thalātha] uwalu shayʾin yutaṣawwaru bihā l-hayūlā*. This has been changed into *wa-annahā awwalu*

nifies most properly this meaning [of informed matter], since 'substance' signifies this only *qua* [abstract] root morpheme [322] because substances are [that which is] not in a substrate. This is what Porphyry taught, who claimed that this is the doctrine of previous philosophers such as Plato[a] and others, except that these [philosophers] disagreed inasmuch as some conceived the prime matter as such as formless, while others such as the adherents of the Stoa conceived it as informed by the dimensions [323]. Other [philosophers] maintained that the three dimensions are sequels of a simple form which exists in prime matter, and that it is due to this form that body receives [the properties of] divisibility and continuity. They [also] claimed that this [form] is one [and the same] and common for all sensible things just as is the case
a74 with prime matter. This position is held by Ibn Sīnā [324]. This meaning is most appropriately signified by the term 'corporeal', since [the latter] is a paronym, and paronyms most appropriately signify accidents.

j94 We say now: As for the adherents of the first doctrine, i.e. those who held that dimensions are principles of a thing through which matter is constituted, they necessarily have to suppose that dimensions[b] are substances, since they are principles through which prime matter is constituted, and that they [are that which] makes known[c] the quiddity of the
q77 individual substance. But it is evident that dimensions in so far they are dimensions are far from making known the quiddity of any individual substance whatsoever. This is so because individual substances, as shown in the natural sciences, are of [the following] two types [325]: either they have simple forms (these are the forms of the four elements), or they are composed and have composed forms. The latter are again [subdivided into] two kinds: either they are composed of [what pertains to] the genus of simple [elements] [326], such as the forms of homeomeric bodies, or they have souls [as their forms].

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shayʾin tataṣawwaru bihi l-hayūlā by Amīn (p. 73, l. 9) as well as in the three previous modern translations. However, the reading *bihā* (and, consequently, the vocalization *uwalu shayʾin*) is confirmed twice, and this likewise unanimously in all manuscripts, a few lines below.

a Reading, with ms. *Q* and I. Mantino, *ka-Aflāṭūn* instead of *Aflāṭūn* of the remaining manuscripts.

b The Arabic text corresponding to 'are principles ... that dimensions' is omitted by homoioteleuton in ms. *H* and ignored in Van den Bergh's translation.

c Reading, with ms. *M* and I. Mantino, *tuʿarrifa* instead of *Y-ʿ-R-F* in the remaining mss. (adopted by Jihāmī) and *naʿrifa* edited by Amīn.

Evidently, dimensions are posterior in predication to any of these kinds [of substances]; rather these [substances] are employed in the definition of the dimensions in the way substrates are employed in definitions of accidents (as is clear to anybody who has studied the discipline of logic). But it is impossible to imagine dimensions being the first thing to be instilled in prime matter and as being, at the same time, accidents in actuality[a]. For accidents are in need of a substrate in another way than forms, since accidents need a substrate in actuality which has a form, whereas forms are not in need of a substrate inasmuch as they are[b] actuality. In this respect [we say that] the individual concrete [thing] is constituted by the form, but not by the accident. In a75
short, the difference between the relation of form and substrate and the relation of accident [and substrate] is self-evident to anybody who has studied these issues.

However, [we have to differentiate:] the dimensions which are instilled first in matter[c] are numerically one and common to all bodies. They are dimensions in potentiality because they are not determined by any limits before form is established in them. As soon as form is established in them, they become actually determined according to the quantity specific to this form (for forms which are [subject to] coming- j95
to-be and corruption have quantities determined by prime matter). These [potential] dimensions, now, are that which does not exist sep- q78
arated from prime matter and is subject to more and less only in connection with coming-to-be and corruption. The ancients agreed that these three dimensions existing in prime matter in this way, are dimensions instilled primarily in matter and that form is instilled in it only by means of these dimensions. But [conceived] in this way, these dimensions cannot be substances, for if they were substance, they would be [still] substance once turned into actuality by receiving their [actual] m374r
limits, instead of [being] quantity, which is absurd.

In general[d], those who maintained that prime matter as such is informed and that the dimensions are its form have been proved wrong in

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a 'In actuality' *(bi-l-fiʿl)* is omitted in mss. *H* and *M* and in the editions by Quirós and Amīn, but attested by all other manuscripts (including I. Mantino).

b *Hiya* in all manuscripts except ms. *M* which reads *huwa* ('it is') adopted by Quirós and Amīn.

c Or 'which are instilled in prime matter' according to mss. *M* and *Q*.

d The entire preceding section, from 'However...' up to 'In general', is omit-

the natural sciences [327]. For if things were as they claim, corporeality would be an individual unit resistant to [change through] the forms of that which comes to be. Their mistake was to assume that corporeality is generically stable, that is, to think that it is imperishable or stable on
a76 the condition that it is an accident and to think that it is stable on the condition that it is form[a]. According to this view, it is necessary [to assume] that prime matter is informed not only through the dimensions but rather through a multiplicity of accidents which are inseparable from prime matter and common to [all] simple bodies.

As for the adherents of the second doctrine, if they mean that there is a simple form in actuality other than the forms of the simple bodies, namely gravity, lightness, and, in general, natural impetus, as it appears from Ibn Sīnā's words, and that the composite of this form and prime matter is the substance which has corporeality, that is to say the three dimensions, as an accident, and [that] this is what is signified by the term 'body', or [rather] 'corporeality' (since a paronymous term, as
q79 said before, is most appropriate to signify this [accidentality] as far as it is conceived in this way), then, upon my life, this is a preposterous view, for it would necessarily entail that coming-to-be of the elements
j96 is [a process of] alteration [328].

But if they mean with this conception the nature of the natural impetus established in prime matter, which is like a genus of the forms of the elements, then it is a true doctrine, indeed. In this way, we say that body or corporeality is the most general genus found in individual substances, and in this respect it exists in combined [things] in the mode in which genera exist in species[b], I mean by an existence intermediate between potentiality and actuality [329].

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ted in ms. *H* and in the translations by Horten and Van den Bergh; cf. p. 93, footnote *c*.

a The phrase 'or stable ... is form' is omitted in ms. *H* and in the translations by Horten and Van den Bergh.

b After 'species' ms. *H* adds (without support in any other manuscript): 'because we use 'body' in lieu of that which is united of matter and general form, which is related to form as living being is related to the form of the species subsumed under it, in so far that which is united [of matter and general form] has dimensions as an accident', ed. Quirós, p. 79, l. 7–10, Amīn, p. 76, l. 14sq. Interrupting the flux and syntax of the sentence, this clause is presumably an interpolated marginal gloss.

As for corporeality, [being that] which is shared by simple bodies, this is not[a] form of the natural impetus in so far as dimensions are a77
accidents of these [simple bodies], but rather the dimensions, which are common to [all] simple bodies, are numerically one inasmuch as we say that they exist in matter primarily through the [natural impetus][b]. They are neither genus nor employed in a definition signifying the general form [330]. This is why the concept of body representing matter is different from the concept of body representing general form (the difference between genus and matter has been explained elsewhere [331]).

The particular matter of the celestial bodies has the specific property that no material dimensions are instilled in it (I mean [dimensions such as] those which are common [to simple bodies] and transferred from potentiality to actuality when forms are instilled in them), since they are eternal[c]. Hence, it is completely evident that it is in some equivocal way that we predicate the term 'body' or 'corporeal' of the celestial body and of bodies with a rectilinear motion, since the nature of natural q80
impetus is very much different in these. For the natural impetus found in the simple [elements] consists in their contrary forms' being found in prime matter[d]

from where they receive the accident of corporeality. The meaning by means of the existence of common dimensions (this is why

a The negation is omitted in ms. *H* and in the translations by Horten and Van den Bergh (which is why Van den Bergh, p. 203, note 66^2, blames Ibn Rushd for inconsistency).

b *Bihī* (scil. *bi-l-mayl*), omitted in ms. *M* and in I. Mantino, secluded by Quirós.

c The Arabic text corresponding to the preceding eleven lines ('but rather ... are eternal') is omitted in ms. *H* and in the translations by Horten and Van den Bergh. The lacuna has almost exactly the same length as the omission mentioned above, p. 91, footnote *d*, and occurs roughly one page after the latter. It is therefore not implausible to assume physical damage of the antigraphon of ms. *H* as potential cause of these omissions.

d The following lines are again transmitted in two versions. In the left column I give a translation of the version of ms. *H (min ḥaythu ʿaraḍa lahā l-tajassumu wa-maʿnā l-mayli fī l-jirmi l-samāwiyyi ʿibāratan ʿani l-jawhari l-mawḍūʿi bi-l-fiʿli bi-ṣūratihī li-l-ḥarakati lahū wa-huwa lladhī qīla fīhi innahū laysa lahū ḍiddun wa-li-dhālika kāna basīṭan lā murakkaban)*, which in all likelihood is the earlier version. The right column displays the version of the remaining mss. printed, with minor variants, in Quirós, p. 80, l. 3–8, and Jihāmī, p. 96, l. 20–24.

ing of natural impetus in celestial bodies, on the other hand, is equivalent to the substance which, in actuality and by its form, is the substrate of the movement of [the celestial body]. This [kind of natural impetus] is said to be without a contrary and, therefore, simple and uncombined,

their forms are divisible[a] through the division of matter [332]). The meaning of natural impetus in celestial bodies, on the other hand, consists in that there are non-contrary forms in a matter which is indivisible with respect to dimensions and, by its nature, not detached from form, and this not even in potentiality, while these [forms] do not subsist in matter in such a way that they would be divisible through its divisibility,

j97 as has been shown in the natural sciences. If all this is the case, it is clear that body considered by the mathematicians is different from physical body. For mathematicians consider dimensions only as ab-
a78 m374v stracted from matter[b], whereas the physicist considers only the body which is composed of matter and form, [that is] in so far as dimensions are its accident. Or else, [he considers] the dimensions [themselves] in so far they are in such a body inasmuch as it can be the task of two sciences to consider something that is common to both (as explained in the *Book of Demonstration* [333]).

With this the inquiries of the present chapter come to an end. They cover the contents of [Books] VI and VII of the [metaphysical] books attributed to Aristotle [334].

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a *Munqasima* in mss. *M, P* and I. Mantino, the remaining mss. have *ghayra munqasima* ('indivisible').

b Mss. *A* and *P* add *ʿalā annahā munqasima* ('yet divisible'), which has been adopted by Amīn and Jihāmī.

CHAPTER THREE

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q81

Having dealt with the species of sensible being and their principles through which they are sensible [being], and having determined how these are related to one another with respect to existence, we have to proceed by treating the things which are like concomitants with respect to them.

Although we make the consideration of the one and its species part of the present section, we do not neglect that it belongs [also] to the previous section[a], since 'one' is employed in this discipline coextensively with 'being'. However, given that one is the opposite of many, which itself likewise has concomitants, it falls also in a certain way in this part[b] [of metaphysics]. Therefore, we decided to inquire into the one together with its concomitants in the present section. Aristotle did the same, I mean he devoted a separate book to the inquiry into [the one] and its concomitants, namely the ninth book [of the *Metaphysics*] [335].

However, we shall begin with a discourse on potency and actuality and with the determination of what potency really is [336]. We say: 'Potency' is predicated of many things as specified above [337]. However, we have to leave out of consideration [here] that of which the term 'potency' is predicated equivocally, such as when we say of a certain line that it has power over another line [338]. Those meanings, on the other hand, which are predicated not by pure equivocation, but rather by analogy to one principle, will have to be considered here again. For it is in this respect that a plurality of things is the subject matter of this science, as said above.

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a80 j99

One [class] of things signified by [the term] 'potency' in this mode [of predication] [339] is [subdivided into] two kinds. The first are the active potencies, those [potencies], that is, which act on another [thing] *qua* other. Potencies of this kind may even happen to act on themselves, yet this [only] accidentally (as the physician may heal himself[c]) [340]. The

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a Literally 'the first section', i.e. the first section of the first major part of metaphysics treated in Chapter II of the Epitome; cf. above, p. 25 and 26.

b Reading, with mss. *H, M* and I. Mantino, *fī hādhā l-juzʾ* instead of *fī hādhā l-ḥadd* ('under this definition') of the remaining manuscripts.

c In all manuscripts except ms. *H* there follows: *wa-ammā l-ṭabīʿatu wa-l-quwā l-ṭabīʿiyyatu fa-l-amru fīhā bi-l-ʿaksi aʿnī anna fiʿlahā bi-l-dhāti* (*bi-l-dhāti* om. I. Mantino) *innamā huwa fī dhātihā* ('As for nature and natural

second kind are the passive potencies, i.e. those [potencies] whose nature consists in being acted on by another [thing] *qua* other[a] without being potentially acted on by themselves [341]. When we speak of something with no potency of being acted on by itself we refer, of the [various] kinds of privation, only to natural privation, that is the absence of something in what naturally does not have it, not to privation by violence, that is the absence of something in what naturally has it (we have already explained above in how many ways 'privation' is predicated) [342].

m375r One might raise the question, why it is that some potencies, whose nature is to be acted on by another thing, are also acted on by themselves (such as [potential] health which emerges from the art of healing and also from itself), whereas this is not possible in other [potencies] (such as the [potential] house, for this [can] not come to be except from
q83 the art of building) [343]. The reason for this is that the existence of health is accomplished by both art and nature. Accordingly, the part of such arts lies in supplying the agent [cause] only, and then to see whether the [desired] result is brought about by the moving [cause] which is not set in motion by the will [of him who practises this art]
a81 [344]. As for the house and similar things, on the other hand, everything whereby their [existence] is accomplished comes from the art and depends on the will [of him who practises this art].

Since some active potencies are present in ensouled [beings], others in soulless [things], some are active by nature and others by desire and will; and of the latter some are rational, others are non-rational. Those [potencies] which are non-rational and not [dependent on] desire are

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potencies, things are the other way round, I mean their essential activity [consists] only in acting on themselves'). I follow ms. *H* in omitting this phrase, presumably an interpolated gloss, which is a blunt contradiction to Ibn Rushd's doctrine that nothing acts on itself *qua* same; cf. *Tahāfut al-tahāfut*, p. 433, l. 4–6, and *Long Commentary on the Metaphysics*, p. 1110, l. 6sq.

a Ms. *M* and I. Mantino add here another interpolation, obviously from the same glossator as the preceding one: *lā llatī tanfaʿilu min dhātihā ka-l-ḥāli fī l-ṭabīʿiyyati bali llatī laysa fīhā quwwatun aṣlan an tanfaʿila min dhātihā bal min ghayrihā bi-mā huwa ghayrun wa-khārijun ʿani l-munfaʿil* ('[i.e.] not those which are acted on by themselves, such as the natural [potencies], but rather those which have no potency at all for being acted on by themselves, but [only for being acted on] by another thing *qua* other and distinct from that which is acted on').

characterized by [the fact] that they produce by themselves only one of two contrary [effects], e.g. the hot can heat and the cold can cool, yet they have no potency other than [producing] one of these [contraries]. (In this context, 'having no potency' means the [kind of] privation j100
which consists in the absence of something from that which naturally does not have it.) As for those [potencies] which act by desire [345] and will, these include the potency to produce any contrary [effects] whatsoever. This is why in the productive arts the cognition of contraries is part of one and the same knowledge (e.g. the art of healing includes the knowledge of both health and illness), except that the knowledge of one of the contraries is what they essentially aim at, whereas [that of] the other contrary is by some sort of accidentality. For these arts do not aim at producing both contraries (e.g. the art of healing knows illness not in order to produce it, but it knows health in order to produce and preserve it) [346].

A further characteristic of the natural potencies consists in [the fact] that as soon as they meet their [natural] patient, they act [on it] by necessity (as fire ignites wood necessarily as soon as it meets it). That which acts by desire and will, on the other hand, does not have to act q84
by necessity as soon as it meets its patient. For, if that were the case, it would produce contrary [effects] at the same time, since it is its nature to [be capable of] producing either or of refraining from producing anything at all. From this it is evident that that which decides in favour of one of the two acts producing contrary [effects must] be another potency, namely the one called 'desire' and 'will' when this potency is a82
in contact with the potency of imagination[a], according to what has been shown in the book *On the Soul* [347]. If the active and passive potencies are of the kinds described, it is clear that acting or being acted on well or badly is something that follows these [potencies]. For whenever there is a good acting [348] or being acted on, it is [necessarily] done or received, but not vice versa (such that that which acts or is acted on is [necessarily] acting or acted on well) [349].

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a Reading *quwwatu l-khayāl* instead of *quwwatu l-ijmāʿ* ('the potency of consensus') in most Arabic manuscripts (also 'a.l. concordia', in I. Mantino *in margine*), *quwwatu l-jimāʿ* ('virtus copulatiua') in I. Mantino, or *quwwatu l-ijtimāʿ* ('potency of gathering') in ms. *T*; cf. note 347.

Having clarified what sort of potency is predicated of things moving or set in motion, we now shall discuss that of which the term 'potency' is predicated primarily. This is what we signify by saying 'that which is possible' [350]. How this meaning is related to the other things of which
j101 the term 'potency' is predicated becomes plain only by determining [the meaning of] actuality [351]. For besides being opposites, potency and actuality belong to the [class of] relatives, and any relative can be conceptualized only by relating it to its correlate. Also, it is unnecessary to seek a definition of everything in one and the same manner [352]. For not everything has genus and differentia, but rather some things are
m375v definable [only] through their opposites, others through their effects, and again others through their acts and affections, or, in general, through their concomitants [353].

In none [of these] is there a vicious circle which, according to Ibn Sīnā, occurs in determining such things [354], because the nature of
q85 relatives necessarily entails[a] that each of two relatives occurs in the conception of the other. Furthermore, when either relative is included in the conception of the other[b], this inclusion is not based on [the fact]
a83 that[c] one of the two is prior to the other, in the way causes of a thing are included in its conception. For neither of the two relatives is the cause of the other, but rather they only exist together, which is why the conception of the one is associated with that of the other. What Ibn Sīnā says would necessarily apply only if one conception occurred in the other in so far it is prior to it with respect to being[d] and better known with respect to conception. But this would necessarily entail that the thing is conceptualized on its own, which is not the case. Rather, both [relatives] are simultaneous in being and in knowledge [355]. The reason for this is that this category is something the soul introduces into

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a Reading, with ms. *M* and I. Mantino, *fa-inna l-muḍāfayni yalzamu min ṭibāʿihimā ḍarūratan* instead of *fa-inna aḥada l-muḍāfayni yalzamu min ṭibāʿihī ḍarūratan* ('because the nature of one of two relatives necessarily entails') of the remaining manuscripts.

b Reading, with ms. *M* and I. Mantino, *fa-inna l-muḍāfayni matā* ... instead of *fa-inna aḥada l-muḍāfayni matā* ... of the remaining manuscripts.

c Following ms. *M* (*min jihati anna*) or ms. *H* (*min anna*) instead of the remaining mss. which have only *min*.

d Reading, with ms. *M* and I. Mantino, *fī l-wujūd*, omitted in the remaining manuscripts.

the existents [356]. If there were no soul, there would be no relation, as there would be no relationship [in general] [357] without there being soul. If one of the two subjects of such a relationship is conceptualized by [conceptualizing] this [relationship], by necessity the other subject is [also] conceptualized through this, since the relationship can only exist through these two subjects.

If this is correct, actuality consists in a thing's existing differently from the way [in] which we say of it to exist potentially [358]. This [kind of] privation can be understood in two ways: [i] the absence of a thing from that in which it naturally will be found or has been found at j102
another time (this concerns things which are now in actuality, now in potentiality). [ii] The absence of something from that which naturally does not have it (this is how actuality is conceived in eternal things as privation [of potentiality]). Potentiality, on the other hand, is a disposition in a thing and its inherent possibility of existing in actuality. This meaning of 'potentiality' is different from the one in which we say that the infinite exists[a] in potentiality (as when we say of movement or time q86
that they are potentially infinite). For the infinite *qua* infinite does not turn into actuality in such a way that it exists separated from this a84
potentiality, but rather the meaning of 'potentially infinite' is that the actuality in it is always connected with this potentiality [359]. This has been explained in detail in the *Physics* [360] (as a matter of fact, much of what is proved in that work is allied to this science [of metaphysics]).

Now, if this is the case and it is plain what potentiality and actuality are, it is [also] clear that they are found primarily[b] in substances and secondarily in the remaining categories (i.e. quantity, quality, relation, where, when, having, doing, and being-affected), no matter whether the affection of a thing is due to an intrinsic principle (as is the case with natural things) or [due to] something extrinsic (as is the case with potencies mentioned above). Likewise, 'doing', too, means whatever acts on itself or on another thing. This [361] is [shown by the fact] that the potentiality of generating man from [menstrual blood] inherent in

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a Reading, with ms. *M* and I. Mantino (fol. 375vb), *inna lā mutanāhiyan mawjūdun*, instead of *inna ghayra l-mutanāhī mutanāhin mawjūd* ('that the infinite is finite and exists') in ms. *H* and *inna l-ashyāʾa hiya mawjūda* ('that things exist') in the remaining manuscripts.

b Mss. *H* and *M* add 'only' *(innamā)*.

menstrual blood is prior to the potentiality of generating a grammarian[a] inherent in it. This is so because the proximate disposition of apprehending grammar is established only posterior to establishing the form of man.

In ancient days as well as in our time, there were those who denied that the possibility of that which is possible is prior in time [to actuality] [362], thus making the possible [something existing] simultaneously with actuality. Negating the nature of the possible as such, these [thinkers] have to admit that the possible is necessary and the
m376r necessary is possible. However, our contemporaries postulate possibility only [as possibility] from the part of the agent [363]. We shall enumerate the absurdities resulting from [the doctrine of] these people in [our] discourse on the principles of the departmental disciplines [364],
q87 since this is an important principle of the theoretical disciplines [365]. A mistake in this respect entails many [further] mistakes; in short, it is
j103 a85 among the major causes of drifting into sophistry [366]. Those people of our time preclude that man has any capability or power [to act] [367]. As a consequence [their doctrine] nullifies practical philosophy[b] as well as will and free choice [368] and all productive disciplines [369]. However, as I have said repeatedly, those people do not maintain such things because this is what reasoning led them to, but rather in order to confirm with such [doctrines other] things the validity of which is their primordial fundament and to which their convictions cling. In other words, they seek [only] to falsify what contradicts their [doctrines] and to verify what supports them.

But we have digressed from our subject. So, let us return and say [the following]: As it has become plain what potentiality and actuality are, we shall now state when each particular thing is in potentiality and when it is not [370]; for not anything whatsoever is anything in potentiality [371]. Evidently, there are proximate potentialities as well as remote ones [372]; and if this is the case, there are [correspondingly]

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a *Naḥwiyyun* in all mss. The reading *laḥm* ('flesh'), adopted by Horten (p. 101) and Van den Bergh (p. 71), is fabricated by M. al-Qabbānī. The same applies to *al-naḥw* ('grammar') in the following line.

b Reading, with mss. *D, M, P* and I. Mantino, *al-ḥikmata l-ʿamaliyya* instead of *al-ḥikmata l-ʿilmiyya* ('scientific philosophy') transmitted in the remaining manuscripts.

remote and proximate substrates. Remote potentialities are not turned into actuality until through the establishment of the ultimate substrate the proximate potentiality has been established[a]. Hence, if one states that one thing exists in another in potentiality, while this potentiality is a remote [potentiality], this is stated metaphorically [373], e.g., when we say that man exists in potentiality in earth or, even more remote than this, in the elements, while it is only in menstrual blood and semen that man exists truly in potentiality [374]. This is the proximate potentiality occurring in the proximate, ultimate substrate. It does not inhere in this substrate in any chance disposition, but only when this is in a disposition in which it is possibly turned into actuality. E.g. semen is said to q88
be man in potentiality when it is introduced into the uterus without coming into contact with air from outside, so that it might be cooled and changed [375].

The case is similar with dispositions [actualized] by the arts, for not every sick [person] is potentially healthy, but only [he who] is in a a86
disposition in which recovery is possible. Hence, the proximate potentiality necessarily requires two things in order to exist at a given time [376], namely the existence of the proximate substrate, and the disposition in which it is [actually] potential. When these two things are j104
given and the efficient causes are complete and nothing [external] hinders them, then the thing is turned into actuality by necessity. Such proximate potentialities, especially as far as natural things are concerned, are characterized by [the fact] that that which moves and turns them into actuality belongs always to one species and is numerically one mover [377]. E.g. that which moves the potentiality for becoming flesh inherent in blood to actuality is but one mover, namely the nutritive faculty [of the soul] which [resides] in the organs [of the body] [378]. On the other hand, the [remote] potentiality of bread for becoming flesh requires for its [actualization] more than one mover, namely mouth, stomach, liver, and veins. Still more remote than this is the potentiality for becoming flesh inherent in the elements, for it requires for its [actualization] in addition to these movers the [movement of the] celestial bodies. A lot of foods require, apart from [these] natural mov- m376v
ers, more than one artificial mover, as is the case with bread being moved alternately by more than one art.

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a *Al-quwwati l-qarībati bi-ḥuṣūl* is omitted by homoioteleuton in ms. *H* and left out of consideration in the translations by Horten and Van den Bergh.

According to the habit of the Greeks, the proximate substrate of a thing, in which the [relevant] potentiality is [found], is conceived as that [after] which one names that which comes to be from it by a
q89 a87 derived form of its [name], not by the very name itself; for [the Greeks] do not say 'the casket is wood', but rather '[the casket is] wooden', because wood is what is a casket by proximate potentiality. But they do not derive the name of that thing from the remote substrate, that is, they do not say 'the casket is earthen' or 'aquatic' [379]. However, explaining the [meaning of] remote potentiality by this kind of instruction fell [into disuse] in our times as there is no such [mode of] designation in our language. This [phenomenon] occurs in the Arabic language only in [connection with] accidents and differentiae, for the Arabs do not say 'the living being is[a] rationality', but rather '[the living being is] rational' (from which it becomes evident that form is distinct from substrate); nor do they say 'the body is whiteness', but rather '[the body is] white'.
j105 Genera, on the other hand, they predicate of species by designating them through nouns which are root morphemes, thus saying 'the casket is wood', 'man is living being'.

If then this is the case and it has become plain that particular things are partly in potentiality, partly in actuality, and that most things have more than one potentiality, it is clear that for these [potentialities] there is more than one substrate. And since substrates exist only in so far as they are in actuality, there is also more than one actuality of a thing. However, since this cannot go on infinitely in both directions, as will become evident below and has already become plain in physics, it is clear that the ultimate substrate is that which exists in pure potentiality, and that it is the cause through which the remaining substrates acquire potentiality [380]; for this is the nature of things predicated *secundum prius et posterius* together with that to which they are related[b]. Likewise, the ultimate actuality in each single existent is the cause of [the
q90 fact] that there are more than one actuality in them. Consequently, one does not say of that which is between these two extremes that it is pure

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a Mss. *H, M* and I. Mantino read 'some living beings are' *(inna baʿḍa l-ḥayawāni huwa)*, the remaining mss. omit *baʿḍ* ('some').

b I follow Quirós in reading *alladhī tunsabu ilayhi*. This reading is supported by I. Mantino, whereas all Arabic manuscripts have either *yunsabu* or *nansibu* instead of *tunsabu* neither of which makes sense.

potentiality or pure actuality. E.g. prime matter is the most remote cause of [the fact] that the remaining substrates of man are potentially man, such as the potentiality of this inhering in the elements, then in earth, then in blood, then in flesh, then in each part of the soul. Likewise, the ultimate actuality in each single existent is the cause of [the fact] that in [man] there are other things existing in him in actuality. E.g. rationality is one of the causes of [the fact] that there is being-a-living-being, for being-a-living-being does not exist absolutely but only as being-this-living-being. Similarly, being-a-living-being is among the causes of that which is capable of nutrition, for being-body-capable-of-nutrition does not exist absolutely but only as being-this-[body]–capable-of-nutrition. In short, in each [correlate] pair of actualities[a] there is present [something] of this relation between simple form and prime matter [381]. a88 j106

As matter[b] does not [actually] exist without form—since if it existed without form, the non-existent would exist—so is this the disposition of each single [actuality] of any pair of actualities displaying such a relation. From this it is evident that potentiality, although predicated *secundum prius et posterius*, is a concomitant and [inseparable] companion[c] of matter, as it is also evident that actuality, although predicated *secundum prius et posterius*, is among the concomitants of form and its inseparable companion[c] [382].

As it has become clear that there are forms existing in pure actuality free from any admixed potentiality, it is clear that these are the cause of the existence of those [things] whose actuality is mixed[d] with potentiality, no matter what [kind of] potentiality this might be, I mean [whether it is] the potentiality of change in substance or [that of] any m377r

a Omitting, with ms. *H* and I. Mantino, *aḥadihimā ilā l-ākhar* ('the one [related] to the other') which does not fit into the syntax and is presumably an interpolated gloss.

b Omitting, with ms. *H* and I. Mantino, *al-ūlā* ('prime', i.e. prime matter).

c Lit. 'shadow' *(ẓill)*.

d Reading *hādhihi l-mashūbati* as transmitted in all Arabic manuscripts except ms. *M* which reads *hādhihi l-mashūb* (adopted by Quirós and Amīn) where *hādhihi* seems to be corrected from *hal*. The clause as edited by Quirós and Amīn would mean: 'that these are the cause of [the fact that] those [things] have an existence [in which] their actuality is mixed with potentiality' which hardly hits what Ibn Rushd intends to say, since what makes potentiality admixed to actuality is matter rather than these pure actualities; cf. notes 381, 382.

a89 q91 other [kind of] change [383]. This must be the case in view of [the fact] that actuality is found in those things in a certain disposition, whereas [it is found] here absolutely. As has been said repeatedly, that which is found in a certain genus absolutely is the cause of existence for that which is found in this [genus] in a certain disposition [384]. E.g. fire, being that of which[a] heat is predicated absolutely, is the cause of the existence of heat in every [hot] existent [385]. This premise is often used in this science [of metaphysics]; it is an important principle among the self-evident principles of [metaphysics], and we have to be well acquainted [386] with this concept to such an extent that it has absolute certainty [for us] [387]. This is why Aristotle postulated it [388], that is, [why] he set it up in Book I [α] of his book on this science.

It is then clear what potentiality and actuality is, and when each single particular thing is in potentiality, and when it is not, as well as how [different] potentialities are related to one another and [how one] actuality is related [to another]. Hence, we have to consider now which of the two is prior to the other, that is, whether potentiality is prior to actuality or vice versa [389]. As stated above, 'prior' is said in [various] ways, [among them] firstly prior in time and secondly prior in terms of causality [390]. These two meanings of the modes of predication of 'prior' are the primary objects of research here in [the context of] potentiality and actuality.

j107 We say: Most, if not all, pre-Aristotelian ancient [philosophers] maintained that potentiality is prior to actuality in time and with respect to causality [391]. Accordingly, some maintained the [doctrine of] mixture and an infinite number of [constitutive] parts [of things] [392], others [the doctrine of] an unordered movement [393]. What led them to such [doctrines] is [the fact] that they did not acknowledge any prin-
a90 ciple except the principle of matter. Moreover, they seem to make a universal judgement upon the parts of the world on the basis of their
q92 opinion that potentialities of particular things are prior to them in these two meanings (I mean [priority] in time and in causality). However, when we think about the issue of [potentiality and actuality] appropriately and consider them in so far they are natural phenomena, it is clear that actuality is prior to potentiality in both meanings [of priority].

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a Reading, with ms. *M*, *wa-hiya llatī* instead of *hiya llatī* in ms. *H*. The remaining manuscripts omit *hiya/wa-hiya* entirely.

For it has been shown in the *Physics* that for everything in change there is something which changes [it], and [that] this holds true in [all] four kinds of change [394], as it is evident that potentiality does not satisfy [the requirements] for being turned into actuality by itself. This is clear in the case of three [kinds of] change, namely change in substance, in quantity, and in quality, since in these [kinds of change] the moving cause and the agent are external. As for change in place, it is not [so] clear. However, this issue has been explained in [Books] VII and VIII of the *Physics*.

This now is one [reason] whereby it becomes evident that actuality is prior to potentiality in causality and time. On the other hand, it is also evident that potentiality in the case of particular potentialities is posterior with respect to causality, while it is prior to actuality in time. This is so because actuality is the entelechy of the potentiality and that for the sake of which the potentiality exists as well as its final cause [395], for it is impossible that there is an infinite series of entelechies [of an individual], as will become clear below [396]. If this is the case, actuality is prior to potentiality in so far it is efficient and final cause. The final cause is the cause of causes, for those [things] are only for the sake of it [397]. This [kind of] priority has to be taken into account in its own right, for priority in time, no matter whether in potentiality or j108
actuality, exists in that which is prior [only] accidentally. In other words, [the fact] that the causes of a thing are prior in time to that thing a91 q93
is an accident occurring in particular things subject to coming-to-be and corruption, for if this [priority in time] pertained essentially to the m377v
efficient causes, there would be no eternal cause at all [398]. And if there were no eternal [cause], there would be, by necessity, nothing that comes to be and corrupts, as has been shown in the *Physics* [399].

Furthermore, it is clear that causes constitute primarily and essentially only the essence of that which is caused[a] [400]. Whether this implies that they are prior to that which is caused in time, as claimed by many theologians, is by no means evident. Assuming this, in fact, entails the absurd consequences just mentioned, I mean, there would not exist any generated thing, not to speak of eternal [things]. For if we suppose this to be the case, the series of causes could go on infinitely

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a Reading, with ms. *M* and I. Mantino, *dhāta l-musabbab* instead of *dhāta l-sabab* ('only the essence of the cause') in the remaining manuscripts.

without there being a first cause. And if there is no first, there is no last. But then supposing the causes of the whole world to be prior to it in time, as the causes of the parts of the world which are subject to coming-to-be and corruption are prior [in time] to these, would necessarily entail that this world is a part of another world, and this would go on ad infinitum [401]. Or else, we would have to assume that this world is transient with respect to its parts, but not with respect to the whole. Thus, [it is clear that] these and many other absurd consequences result from positing this assumption. All this results from their [doctrine] only due to the fact that they impose on the efficient [cause] the condition that it has to be prior in time. Confronting them with the question how the efficient [cause] of time can be prior to time [itself] thus bewilders
a92 their minds[a], for if they reply '[it is prior] by atemporal [priority]', they admit that there is an efficient [cause] prior to its effect without [being prior] in time, and if they reply '[it is prior] in time', they are again faced with the [same] question with respect to this time. Or else, they
q94 might reply that time is self-constituted and uncaused, but this is not part of their teaching. However, all this is more appropriate [to be dealt with] in the third part of this science [402].

Returning to where we have been, we say: It is also evident that
j109 potentiality is not prior to actuality in time inasmuch as it cannot be separated from actuality, as has become clear from [considering] the case of prime matter [403]. Moreover, the potentiality of [becoming] something else [found] in many things exists in these [things] only inasmuch as there is in these [things] some sort of actuality of that which it is the potentiality of. E.g. he who is learning, being in potentiality a learned [person], reaches the ultimate state of knowledge only in so far as there is some sort of knowledge in him. Otherwise, there results the conundrum of Meno[b] mentioned in [Book] I of the *Posterior Analytics* [404].

a Reading, with mss. *A, M* and *P*, *tāhat ruʾūsuhum* instead of various readings for *tāhat* in the remaining manuscripts.

b Reading *shakku Mānun*. All Arabic manuscripts read *mā fī* or similar corruptions for the transliterated Greek name. I. Mantino has 'error Mennonis', fol. 377vb. *Shakku Mānun* occurs as translation of *An. post.* I 1, 71 a 29 'τὸ ἐν τῷ Μένονι ἀπόρημα' in Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 47, *Sharḥ Kitāb al-burhān*, p. 168, 173, 176 (where the Berlin manuscripts reads likewise *Mānī* instead of *Mānun*). Similarly, Ibn Rushd refers in his *Long Commentary* on *Metaph.* IX (Θ) 8, 1049 b 33sq. (p. 1184, l. 5) to 'the famous conundrum

Furthermore, it is clear that actuality precedes potentiality, if everlasting things (being things without any potentiality admixed to them) are prior to transient things (being things mingled with potentiality) [405]. That eternal things do not contain absolute potentiality, I mean the [potentiality] which is part of the [compound] substance [406], has been shown in *De caelo* [407]. The same [holds good] for the potentialities of nutrition, growth and passive alteration. However, it has not a93
been shown that, in addition [to these], they cannot [contain] the potentiality [of change] in place through alteration of position. On the contrary, it has been shown that [they] must [have] it, yet [this only] in a certain manner. For it has been shown there with respect to potentiality [of change] in place that there is an actuality prior to it in which there is no potentiality at all.

This now is how these things can be stated through specific proofs, as many, if not most, of the things searched for in this science [of metaphysics] become clear once we use as postulates what[a] has been
shown in the natural sciences, in order to solve the questions arising q95
with respect to these [things] here. However, it is [also] possible to
show this by general proofs here [in metaphysics]. We say: [(i)] When- m378r
ever a thing is in potentiality, I mean something that moves or something that is moved, it is capable [both] of being and of not being, since this is the nature of possibility and potentiality. [(ii)] We say of a thing that it is necessary, if it has not ceased and is never ceasing [to be] and can in no way be non-existing and contains no potentiality to be so (e.g. nobody will think that the triangle is potentially that whose angles are [in sum] equivalent to four right angles). [(iii)] In light of this, [it is
evident that] the two natures are fundamentally different and [that] he j110
who maintains that the necessary is possible propounds the [possibility of] change of the [different] natures [into one another]. From this opinion the following results, namely that [the necessary] is not necessary [408]. If all this is the case, actuality is necessarily prior to potentiality in every manner of priority [409].

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ascribed to Meno' (*al-shakku l-mashhūru l-mansūbu ... ilā Mānun*, where again *Mānun* is misrepresented in the manuscript); cf. also note 404.

a Reading, with the majority of the manuscripts, *idhā ṣūdira ʿalayhā mā* (for *ṣūdira ʿalayhā* cf. note 388). Mss. *H* and *M* read *mimmā* instead of *mā*. In addition, ms. *M* has *ṣuwwira* ('once we conceive...') instead of *ṣūdira*.

a94 A pending question in this [context] is how eternal things can be principles of transient things. For things which are always [in] actuality necessarily have to act always (otherwise they existed in potentiality). But if that is the case, their effects [likewise] would exist always, since things which, by their nature, now exist, now do not, require necessarily that their mover [displays] the same disposition, I mean that it [now] moves, and [now] not. However, this question can be solved by what has become clear in the natural sciences with regard to eternal locomotion, since motion exists in this way as a sort of intermediate between pure actuality and that which is now in potentiality, now in actuality [410]. It is similar to what exists in [pure] actuality inasmuch as the eternity [inherent] in that [which moves in this way] is part of [its] substance and in so far as that [which moves in this way] does not contain any potentiality for corruption. On the other hand, it is similar
q96 to that which is now in potentiality, now in actuality, on account of the alteration of position [occurring] to it accidentally, and, in general, on account of [its] locomotion. Note how [much] care the divine providence took in conjoining the two [modes of] existence with one another by establishing this mode of potentiality (I mean the potentiality in place) between pure potentiality and pure actuality, in order that one be connected with the other for tying together[a] eternal and transient existence! Because of all this there is no reason for us to fear, as some people think, that this [kind of] motion will ever perish or come to a halt, since there is in them no potentiality for [coming to a halt][b] [411].

Those who do not maintain [the doctrine] of eternal motion are not able to set forth the reason why the creator, being eternal, became the

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a Reading, with mss. *D* and *H*, *ḥattā lta'ama bi-dhālika hādhā li-rtibāṭ*. Ms. *M* reads likewise *li-rtibāṭ*, but *hādhā* is not quite clear and rather looks like *hādhayni*. The remaining manuscripts read *hādhā l-irtibāṭ* instead of *hādhā li-rtibāṭ* (which makes, unacceptably, 'tying together' the subject of 'being connected').

b Reading, with ms. *H*, *laysa fīhā quwwatun ʿalā dhālika*. Ms. *Q* reads *laysa fī muḥarrikihā quwwatun aṣlan* ('there is no potentiality at all in their mover'). The remaining Arabic mss. read *laysa fī taḥarrukihā (fī taḥrīkihā* ms. *M) quwwatun aṣlan* ('there is no potentiality at all in their motion'). The latter can be ruled out with certainty, as Ibn Rushd stated just before (as also in Chapter I) that the motion of the heavenly spheres is characterized by the potentiality of change in position and/or direction. The translation of I. Mantino is based on a hybrid version; cf. also note 411.

efficient [cause] of the world after having been inactive, for they had to admit necessarily that he is acting in potentiality prior to acting [in actuality], and, [consequently], that [his acting] whenever being in potentiality comes into actuality only by a mover or, generally, by an agent prior to it (since [any] transformation of potentiality into actuality is change, and any change [comes] from that which changes) [412]. But all this is evident to him who observes the principles of natural sciences[a]. a95 j111

Having shown that actuality is prior to potentiality in [terms of] causality, we shall now consider [the question] which of the two is prior with respect to acting[b] and being good [413]. We say: Being bad occurs necessarily in privation or in one of two contraries being accidentally deprived of its contrary, such as illness which, although being in some way an existent, is an evil only inasmuch as it is the privation of health. Since potentiality is always at once [potentiality] for both opposites, it is not, *qua* potentiality, a pure good, but rather [something] mixed [414]. Moreover, a potentiality is said to be good or evil only in so far it is related to an actuality. Hence, actuality must be more valuable than potentiality. Since potentiality is the cause of the privation which is an evil, there can be no evil at all in those things in which there is no potentiality, as they are without privation and contrary [415]. m378v q97

These are the things in which there is always [and] under all conditions the good which is the truth. In other words, that which is true in them can never be false, as it commonly happens with things which are now in potentiality, now in actuality [416]. However, there is a [certain] aporia in this; for if that which is always true is found only in that which exists always in actuality, there is no proof [of the truth] for things which exist now in actuality, now in potentiality. But if there is no proof for these [things], there will be no way either to knowing that there are things existing always in actuality, since necessary knowledge can be achieved as such only from what is necessary, whereas we proceed from [the knowledge of] these [changeable things] to the a96

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a Lit. 'the natural principles'.

b I follow the lectio difficilior *bi-l-fiʿli* attested in ms. *D, H*, and *Q*. Q^2 changed *bi-l-fiʿl* into *bi-l-faḍl*, $Q^{a.m.}$ added *bi-faḍl* (sic) *supra lin*. All other manuscripts (including I. Mantino) have *bi-l-faḍli* ('[with respect to] excellence'); cf. note 413.

knowledge of those [eternal things] [417]. [In reply to this] we say: True statements are necessarily either affirmative or negative. Affirmation is nothing else than combining some things with others, negation is nothing else than separating them. If there are things which do not admit
j112 combination, negation is always true of them. Likewise, if there are things which are always combined, I mean those which cannot exist without such a combination, affirmation applies always necessarily to them. And if there are things which admit both together, I mean now to be combined, and now to be separated, then there is not always truth in such things [418].

That these two kinds [of things] do exist in this way is clear. As for the things which are now in combination, now in separation, these are
q98 the particulars. For this concrete triangle may be combined, so that having-angles-equal-to-two-right-angles is present in it, and it may be separated, so that what is true of it turns into being false in itself [419]. Therefore, one says that in such [things] the opposite of that which is true is possible falsehood, [being false only] at the time when this is true [420].

Those things, on the other hand, which are always in combination or always in separation are universal things in so far they are related to one another; and it is in this respect that there is necessity in change-
a97 able things [421]. E.g. having-angles-equal-to-two-right-angles in so far they are equal to two right [angles] is found always in combination with triangle, while triangle is necessarily [combined] with figure [422]. Similarly, rationality is found necessarily in [combination with][a] being-living-being, being-living-being with nutrition, and nutrition with body. As for having-angles-equal-to-three-right-angles, this is found always separated from triangle; and similarly rationality is found always separated from donkey and horse.

Therefore, there is no falsity in these [things] except in the form of error, that is by believing that which is combined to be separated or that which is separated to be combined [423]. Actuality and endurance are in these [things] only in so far as they are objects of thought, not in so far as they are [extramental] existents, for otherwise universals would exist separately. Those who taught the [existence of] Ideas failed to make

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a Ms. *M* adds 'humanity, humanity with' *(al-insāniyyati wa-l-insāniyyatu fī)*; cf. *Long Commentary on the Metaphysics*, p. 1231, l. 6.

this distinction. However, if one attributes to them such an existence outside the mind, [this] can be attributed [to them only] in so far as there is in them the potentiality for [becoming objects of thought] [424]. For if there were in them no disposition for this, it would be absurd to think this about them.

Hence, truth is predicated of things existing always in actuality outside the mind as well as *secundum prius et posterius* of these [universals][a]. That those are true is the reason why these are true, as is the nature of things predicated *secundum prius et posterius* [425]. It is in this respect that evil *qua* falsehood is denied of the everlasting[b] insensible things[c], and that [those things] acquire the good *qua* truth forever[d]. j113 q99 m379r

Having dealt with potentiality, actuality, and their concomitants, we shall now deal with the one and the many and their concomitants [426]. We say: 'One' is predicated in the different ways mentioned above [427]. These can be reduced basically to two meanings, firstly the numerical one, and secondly one in its universal meaning. As stated [before], one in its universal meaning is divided into one by species, one by genus, and what else has been enumerated there. Similarly, the numerical one is predicated primarily of the continuous, then, secondarily and by way of comparison, of that which has grown into one, furthermore of that which is combined[e], and of that which is connected. Then the numerical one is also predicated of the concrete individual which is indivisible in so far it is an individual of a certain species (such as Zayd or ʿAmr); it is also predicated of what is indivisible with respect to quantity[f] (this is a98

a Reading, with mss. *H, Q,* and I. Mantino, *hādhihī* instead of *hādhā* ('this') in the remaining manuscripts.

b *Al-abadiyya*, omitted in mss. *H, M,* and I. Mantino.

c Reading, with the majority of the manuscripts, *al-ashyāʾi l-ghayri l-maḥsūsati* instead of *al-ashyāʾi l-maḥsūsati* ('sensible things') in ms. *H* and I. Mantino (adopted by Horten, p. 118, and Van den Bergh, p. 83).

d *Dāʾiman*, omitted in ms. *H* and I. Mantino (and in the translations by Horten and Van den Bergh).

e Reading, with mss. *H, M,* and I. Mantino, *al-murakkab* instead of *al-murtakiz* ('that which is implanted') of the remaining manuscripts.

f A number of manuscripts add 'and with respect to generalness' *(wa-lā bi-l-ʿumūmi)* which is omitted in I. Mantino and, together with the entire sentence, in mss. *H* and *M*. There is no corresponding concept in the section on 'one' in Chapter I of the Epitome or in the *Long Commentary*.

the one *qua* principle of number); and it is predicated of that which is indivisible with respect to formula and definition [428] (to be divisible in this respect is a characteristic of combined [units])[a]. This [latter] deserves most of all to be called numerically one.

In general, the numerical one is predicated of all that is isolated by itself and set apart from something else either by sense perception or by imagination or in itself. The commonest [way of] isolating something consists in isolating it by sense perception, to which pertains isolating things by place, then also by that which encompasses things [429]. Isolating something by imagination is likewise common, and by this [way of isolating something] one measures lengths and, in general, continuous quantities. Isolating something as individual in itself, on the other hand, is far from being common, and even more remote than this is isolating things by their intelligible quiddities[b] [430].

a99 However, when you take this issue into consideration thoroughly, [it] will become evident [that] this [is the appropriate] division of the meanings in which the one is predicated.

This [latter] is that of which the term 'one' is predicated with respect to the form. 'One' is also predicated in the sense of that j114
which is absolutely simple [431], in other words that which is indi- q100
visible in each genus, such as the colour white in [the class of] colours, the unison in [the class of] melodic intervals, and the sonants or consonants in [the class of] morphemes, or as the one in [the category of] quantity [referring to] that which is indivisible with respect to [quantity] [432]. As there is a first 'one' in each of

a The Arabic text corresponding with the last four lines of the translation (from 'it is also predicated' up to 'combined [units]') is omitted in mss. *H* and *M* and secluded in the editions by Quirós and Amīn.

b The manuscript transmission of the following section up to 'quantity, quality, and position', p. 113, l. 30, is confused due to the fact that parts of this section occur in different versions. The left column of the translation gives the text of ms. *H*, the right column that of the second version as to be reconstructed from the remaining manuscripts; for the texts and the transmission cf. note 430.

these genera, so there is also in it number. [Only] the number which is in [the category of] quantity is the one considered by the mathematician.

It is, thus, plain that it is predicated of the ten categories and that it is coextensive with the term 'being', and that both differ only in respect [of the predication]. For if one takes quiddity in so far it is indivisible, it is one, and if one takes it in so far it is nothing else than quiddity, it is called an existent essence.

It is, thus, plain that 'one' is predicated of the ten categories and that it is coextensive with the term 'being', and that both differ only in the respect [of the predication]. For if one takes quiddity in so far it is indivisible, it is one, and if one takes it in so far it is nothing else than quiddity, it is called an existent essence.

If all this is the case, we have to ask what the one is which is the principle of number and in which way it exists. For if it is clear to us what this is, the quiddity of number will also be clear to us, since number emerges only by [cumulative] reiteration of the one.

But the one which is the principle of the discrete quantity is not the one which is predicated *secundum prius et posterius* of all genera, neither is number *qua* quantity the number which exists in each single genus [433] (as will become evident later). The definition of 'one' as such then consists in saying that it is the measure of number and indivisible in any respect of divisibility [434].

We say: 'One' in number is the concrete thing in the mind

The numerical one is that which is concrete in the mind

which in this [state] is indivisible with respect to quantity, quality, and position. (We included in [this] definition '[indivisible] with respect to position' because the point is indivisible with respect to quantity and quality, but it has position [435].) Such is the principle of number, yet not number [itself][a]. m 379v q 101

a The following sentence is again transmitted in two versions. The version translated in the left column is found in mss. *H* and *M* and printed in Quirós, p. 101, l. 1–3, Amīn, p. 99, l. 10 sq., the version in the right column is transmitted

It is due to [the fact that] this 'one', which falls in the [category of] quantity, is denumerable[a] that one says of anything else of which the term 'one' is predicated that it is one.

It is due to [the fact that] this 'one', which falls in the [category of] quantity, measures[b] number that in each single of the remaining genera there is measurement through the [kind of] number of the relevant genus.

Correspondingly, it is due to numerical multiplicity that one predicates 'multiplicity' of the remaining things. That the one *qua* principle of number belongs to that which is in a substrate is clear. This is why one says in the definition of oneness that it is that with respect to which one calls things 'one'. Likewise, it is self-evident that mathematics abstracts this meaning from the individual substrate and considers it in its
a100 own right (just as it abstracts line, surface, and body).

In this [respect] the consideration of the [one] by him who practises this science [of metaphysics] is different from that by the mathematician. For he who practises this science considers it in so far it is one quantity or one substance[c], while the mathematician considers it only in so far it is one quantity, abstracting [it] from any substrate[d], just as the
j115 physicist considers line and surface in so far they are the limits of the physical body, while the mathematician considers them only in so far they are line and surface. If this is the case, one and multiplicity pertain to the objects of consideration of both him who practises this science as

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in the remaining Arabic manuscripts and printed in Jihāmī, p. 114, l. 14–16. I. Mantino (fol. 379va) has first a (lacunose) translation of the version of mss. *H* and *M*, then—connected by 'vel'—the other version. (The previous modern translations follow mss. *H* and *M*.)

a *'Taʿdīd'* ms. *M*, omitted in ms. *H*, *taqdīr* ('measures') in I. Mantino, fol. 379va6.

b Reading, with ms. *Q* and I. Mantino, fol. 379va11, *taqdīr*. The remaining mss. have *taʿdīd* (cf. the preceding footnote).

c Reading, with mss. *M, Q, T* and I. Mantino, *wāḥidu kammin aw wāḥidu jawharin*. The remaining mss. have various combinations of *wāḥidun fī/min al-kammi aw wāḥidun fī/min al-jawhar* ('one in/of quantity or one in/of substance').

d The phrase 'abstracting [it] from any substrate' occurs in mss. *A, D, H,* and *P* before 'or one substance' and in mss. *G, Q,* and *T* only *in margine*. The translation follows ms. *M* and, partly, I. Mantino (who, in turn, omits the preceding 'one quantity', fol. 379va 32sq.).

well as the mathematician, while their considerations of these differ in respect (as is the case with different disciplines considering one and the same subject matter).

Since the numerical one, when conceived in so far it is one, does not seem to require a substrate, and [since] this is the only respect whereby it falls under the category of quantity[a] (that is by conceiving[b] the meaning of the concrete thing as separated from divisibility with respect to quantity, quality, and position)[c], it is the principle of numerical multiplicity; and numerical multiplicity thus falls under the category of quantity, too. On the other hand, when it is conceived with respect to the [different] things[d] of which one says that they are in themselves one, one attains a classification of all monads of the ten categories, and thus multiplicity pertains also in this respect to the concomitants of the ten categories. This [must be so], when we assume that the substrate of the one as such consists in nothing else than the [members of the] ten categories, that is in the units found in the ten categories which are that which is counted [436] (as the line considered by the mathematician is nothing else than the line found in bodies). q 102 a 101

If this is the case[e], the substrate of the one as such[f] must be either [(i)] something common to all ten categories, as taught by Ibn Sīnā, or [(ii)] coextensive with the term 'being', I mean [in such a way] that it is predicated *secundum prius et posterius*, not [in such a way] that[g] it

a The section 'does not seem ... the category of quantity' is based on ms. *M* and I. Mantino. The remaining manuscripts omit the corresponding Arabic text.

b I follow Amīn's proposal (ed. Amīn, p. 100, note 7) to read here *akhdh* which is the only plausible reading for both semantical as well as syntactical reasons. Ms. *H* has *ʾ-KH-D*, ms. *M* and Mantino's *Vorlage* read *aḥad*, while the remaining manuscripts are lacunose at the present place.

c The translation of the parentheses is based on mss. *H, M* and I. Mantino. The remaining manuscripts omit the corresponding Arabic text.

d Lit. 'if it is divided into the [different] things'.

e 'If ... case' in almost all testimonies (including I. Mantino). Only mss. *H* and *M* omit the phrase which is secluded by Quirós and Amīn.

f Reading, with the majority of the manuscripts and I. Mantino, *al-mawḍūʿu li-l-wāḥidi l-muṭlaq* instead of the following variant readings: *li-l-wāḥidi l-ʿadamu wa-* ('the one [must be] non-existent or') ms. *H*; *al-mawḍūʿu li-l-wāḥidi l-ʿadadī* ('the substrate of the numerical one') ms. *M*; *al-mawḍūʿu li-l-wāḥidi l-ʿāmm* ('the substrate of the universal one') ms. Q^2 supra lin. (with the mark ج).

g Reading, with ms. G^{marg} and I. Mantino, *lā annahū* instead of *li-annahū*

serves to signify a common accident, as maintained by Ibn Sīnā[a], or else [(iii)] it is something separate as it has been the view of many ancients regarding the nature of the one[b] [437].

As for this [latter] doctrine [(iii)], Aristotle takes care of its refutation later on[c].

As for Ibn Sīnā's doctrine [(i)] that the substrate of the one is something additional to the ten categories and that [the one] signifies always and under any condition only a common accident[d] of all categories [438], this is preposterous; for if it signified always and under any condition only things extrinsic to the essences of the things of which it is predicated, there would be neither one *qua* substance, nor *qua* individual, m380r nor *qua* universal concept (I mean *qua* form). And the same [would apply] to all categories: the one would be accidental to the ten categories such that it would be another thing distinct from them [yet simultaneously] common to all of them, which is a doctrine whose invalidity is self-evident.

a102 j116 This might become evident also from the following: Supposing the q103 one *qua* universal concept signifies only a common accident of the ten categories, the said signification of such an accident inhering in each single [category] must be [either] a univocal signification or the signification of a term [predicated] analogically (I mean that which is predicated *secundum prius et posterius*) or a signification by pure equivocation. Now it is clear that 'one' does not signify the things of which it is predicated by equivocation, since there are no essential

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('because') in the remaining manuscripts except mss. *H* and *M* which omit the entire clause.

a The section 'or [(ii)] coextensive (p. 115, l. 20) ... Ibn Sīnā' is omitted by homoioteleuton in mss. *H* and *M* and secluded by Quirós and Amīn and in the previous modern translations (although it is exactly this alternative which is adopted by Ibn Rushd, cf. p. 117 sq.); cf. Jihāmī, p.115, l. 13–15.

b Mss. *H, M*, and I. Mantino add 'that it is [of] the separate things' *(annahā umūrun mufāriqatun)*.

c Ms. *M* adds 'in the last part of this science' *(fī l-juzʾi l-akhīri min hādhā l-ʿilm)*.

d I follow ms. *H* and I. Mantino in reading *ʿaraḍin mushtarakin* instead of *ʿaraḍin mawjūdin fī* ('an accident inhering in') of the remaining manuscripts. The former reading is confirmed by the subsequent refutation, which takes up this expression, as well as by Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1268, l. 1.

predicates among equivocal concepts, nor do these have a unified definition. But neither does it signify[a] these [things] univocally, for it is absurd [to assume] a certain genus[b] of the category of substance and of the accidental categories that is predicated of them univocally, since these are clearly distinct. If that were the case, the individual [instantiation] of such an accident should be apprehensible by sense perception, as is the case with the remaining categories of accidents which indeed do exist. This being the case, the only [alternative] left is that ['one'] signifies these [things] *secundum prius et posterius*. [However,] posited in this way, it signifies nothing but the categories themselves, for this is whereby they are analogical to one another; or else it would be necessary to invent other categories in the categories[c], and so on *ad infinitum*, which is preposterous [439].

If this is the case, the only [alternative] left [(ii)] is that the substrate of the one as such[d] is the one inhering in each category. Somebody doubting this might ask how [it is possible that] somebody believes that the numerical one [is found] in the category of quantity, then [also] that a 103
it exists in each single of the categories, [and this] in such a way that it belongs to these very categories[e] rather than to things added to them.

a Reading, with mss. *D, G, H, T*, *wa-lā dalālatuhū*. Ms. *M* is hardly legible, ms. *A* has *wa-dalālatuhū* ('but it signifies'), the remaining mss. read *wa-lā dalālatun* ('nor do they [i.e., these equivocal concepts] signify').

b *Jins* in mss. *H, M*, and I. Mantino, confirmed by Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1267, l. 16. The remaining mss. have *ʿaraḍ* ('accident'), apparently a reconstruction from *'dhālika l-ʿaraḍ'* in the following sentence.

c Ms. *H* adds *li-annahū yakūnu nisbatu l-ʿaraḍi lladhī fī l-kammi ilā l-ʿaraḍi lladhī fī l-jawhari nisbata l-kammi ilā l-jawhari fa-fī l-maqūlāti maqūlātun ukhar* ('because the [analogical] relation between the accident inhering in the [category of] quantity and the accident inhering in the [category of] substance is [the same as] the [analogical] relation between quantity and substance; hence there [must be] other categories in the categories'). This is obviously an explanation of the preceding sentence and might have been interpolated from a marginal note.

d Reading, with the majority of the manuscripts (including I. Mantino), *li-l-wāḥidi l-muṭlaq*. Ms. *H* reads *li-l-wāḥidi wa-l-ʿadadi shayʾan* ('[that the substrate] of the one and of number is nothing else than'); ms. *M* is in accord with the majority of the manuscripts, yet adds in the margin *wa-l-ʿadad* ('and of number').

e Reading, with mss. *G, H*, and I. Mantino, *al-maqūlāt* instead of *al-maqūla* ('category') in the remaining mss.

q104 This is why Ibn Sīnā deemed it necessary [to assume] that its substrate is an accident existing in all categories. However, it is not as he thought, for the nature of the numerical one is different from that of the remaining units. This [is so] because 'numerical one' means 'individual' in so far this is separated from quantity and quality, that is [it means] that through which the individual is an individual (for it is individual in the sense of being indivisible). But this [meaning] is abstracted from matter by the mind and conceived as something sepa-
j117 rated, for the numerical one and numerical oneness are something invented by the soul in the individual entities. If there were no soul, there would be no numerical oneness and no number at all. Things are different in [the case of] the [individual] line, surface or, in general, continuous quantity [440]. Therefore, number is more remote from matter [than the quantitative unit].

Ibn Sīnā confused the nature of the one which is the principle of number with the one as such, which is common to all categories. Since the one which is the principle of number is an accident, he thought that the one as such, which is general [and] coextensive with being, is [also] an accident. In addition, he[a] aimed at treating this issue with respect to number in the same way as with respect to line and surface, I mean [in such a way] that [the former] has [itself] a nature independent of the existence of the soul [441]. He thus was forced to assume [that there is] in the categories an existence additional to them.

[However,] due to [the fact] that the nature of the numerical one and of numbers combined from [numerical units] is of such a kind [as
a104 described above] the primary conception [of oneness] by nature is found only in number (that is the [number] 'one'), whereas the remaining conceptions of the other genera [of oneness] are [merely] posited conceptions [442]. This is why they are countable and measurable only
m380v by means of number; and in view of this people aim with respect to the remaining conceptions [of unity] at the greatest possible similarity with
q105 the [numerical] one [443], i.e. at establishing indivisible or hardly divisible [conceptions of unity] in the relevant genus. For this reason all nations agree in measuring all [celestial] motions by the diurnal

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a The Arabic text corresponding to 'confused the nature ... In addition, he' is omitted in ms. *H*, secluded by Amīn (p. 103, note 11), and ignored in the translations by Horten and Van den Bergh.

motion, this being the quickest [celestial] motion (I mean, they measure the other motions by the time of this motion); and also the [periods of] rest of the other movable things are measured only by the time of this motion [444]. The same idea guided people in [determining] *sanj* and *dhirāʿ* as the smallest possible [units of weight and length]. As for the other things which are measured, yet do not pertain to the category of quantity, measuring is applied to them accidentally and on the basis of this category, such as measuring heavy and light [things], and even more so measuring black and white [colours].

From this discussion it has become plain what the one *qua* principle of number is, what kind of nature it has, as well as [the fact] that number is the aggregate of such monads and the multiplicity composed of them. Ibn Sīnā opposed such a definition of number saying: How can multiplicity be a genus of number being itself number, since any concrete multiplicity *qua* multiplicity is divisible into this and that multiplicity just as number is divisible into these and those countable [units] (I mean sensible things) [445]? But he is wrong on this [point] because universal multiplicity[a] is more general than numerical multiplicity as the one as such is more general than the one which is the principle of number[b]. Even if it were as he says [446], it is [nevertheless] possible to imagine number as one of the species of countable things, such that multiplicity [serves] as genus for it and for all that is multiple. This is not excluded from the acts of the soul; and it applies to number only inasmuch as the soul acts on the countable things [447]. j 118 a 105

Moreover, [Ibn Sīnā] opposed [this] definition of the one and of number in another respect, for he says: If the one is employed[c] in the definition of multiplicity, which is number, while the one is conceived only through the non-existence of multiplicity in it, then either is employed in the conception of the other. But this is like begging the point at issue [448]. To this I would reply in the same way as in [the case of] the definition of correlates which we have dealt with above [449]. q 106

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a *Al-kathrata l-kulliyya* in the majority of the manuscripts. Ms. *M* and I. Mantino read *al-kathrata l-muṭlaqa* ('multiplicity as such').

b The last sentence is missing in ms. *H*, omitted by Amīn, and ignored in the translations by Horten and Van den Bergh.

c Reading, with ms. *M* and I. Mantino, *yuʾkhadhu* instead of *yūjadu* ('is found') of the remaining manuscripts.

But we have digressed from our topic proper. So, let us return to where we have been. We say: So far it has become plain that 'one' here [in metaphysics] serves to signify all categories and is coextensive with 'being'. It is thus clear that it is taken into consideration by this science in this respect only. When the ancients inquired into this meaning [450] of the one—I mean that it is coextensive with 'being' in so far as both have one [common] subject [of predication] and differ only in respect [of predication]—their views on the first one *qua* principle of existence and cause of the existence of all remaining existents and of their measurability *qua* existents were divided into the [following] two opinions.

On the one hand, there are the ancient natural philosophers who
j119 taught that the particular sensible things are prior to the related universals [451]. This being their position they also held the view that in each genus there must be a first one which is the cause of existence for each species of the genus in question, as well as the cause of [the fact] that these remaining species are measurable and knowable, because they belong to that of which the genus in question is predicated *secundum prius et posterius* (as in the case of the ten categories). E.g. heat is predicated of fire and of things related to fire *secundum prius et pos-*
a106 q107 *terius*, while fire is the cause of the existence of all hot things and of [the fact] that these are measurable and countable. Accordingly, it is
m381r impossible to count hot things by a unit which is white or black, for the measure in each genus necessarily has to be of that very genus [452]. [Since] this, I mean being predicated *secundum prius et posterius*, is the nature of beings *qua* beings, they maintained that there must be a first being which is the cause of [the fact] that all beings exist and are countable and knowable, just as the one in [the genus of] numbers is the cause of [the fact] that all species of number exist and are countable and knowable[a]. And since the material cause is the only [kind of] cause they were aware of, they held the view that the one fitted by this description is such a [material] cause [453]. This is still [true for them] when we take into account the discrepancy in what they thought about the most remote material cause, for some of them maintained that this is water, others that it is fire, and again others identified it with the infinite [454].

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a *Wa-maʿlūmatan* ('and knowable') is omitted in mss. *H, M*, and I. Mantino.

The later [generations] of [ancient philosophers] [455], on the other hand, were aware of [the existence of] the formal cause, yet conceived it in a way different from what it [really] is; for they thought that the intelligible [aspect] of a thing is an extramental existent and has a more eminent [mode of] existence than its sensible [aspect]. Therefore, they taught that the universal one, which is common to all of which it is predicated, is the cause of the existence of all beings which are said to be one as well as the cause of their measurability.

Basically, these are the results of the consideration of this question [provided] by those who preceded Aristotle. Aristotle now distinguished[a] between an intelligible and a sensible existence of forms[b] and [made clear] that the intelligible *qua* intelligible has no extramental j120
existence, but rather exists outside the mind only *qua* sensible [form], and that the ten categories are the most general sensible things. Fur- q108
thermore, it had already become evident with respect to the accidental a107
categories that in each of their genera there is a one which is the cause of existence for all species existing in the genus in question as well as for their measurability [456]. E.g. whiteness which, in the [genus of] colours, is the cause of the existence of the other colours and of their measurability (for blackness is the privation of whiteness rather than something in itself), and similarly in the [genus of poetic] speech the [parts of a foot called] 'cord' and 'peg' [457] which are metres of speech, or the interval of a quarter tone [458] in the [genus of] melodic intervals [459]. Consequently, [Aristotle] maintained that there must be such a thing in the category of substance, since there are many substances, I mean that there [must] be in this [category] a one which is the cause of the existence of the remaining substances, and not only of substances but also of the remaining beings, for these are measurable only in so far as they exist in a substance (for they cannot exist other than through substance as has been shown at the beginning of this science [460]).

a Reading, with ms. *H*, *infaṣala lahū* instead of *T-F-Ṣ-L lahū* or similar undotted versions in the remaining manuscripts.

b Reading *wujūdu l-ṣuwari l-maʿqūlu min wujūdihā l-maḥsūsi*. All manuscripts read *wujūdu l-ṣuwari l-maʿqūlati min wujūdihā l-maḥsūsi* which makes no sense, for that which is distinguished must be either intelligible forms *vs.* sensible forms (which would require *min wujūdi l-ṣuwari l-maḥsūsati*) or intellectual *vs.* sensible modes of existence of forms. The continuation of the sentence indicates that it is the latter what Ibn Rushd is referring to.

If the one to which this description applies is found as [something] separated from matter, the term 'oneness' is most appropriately [predicated] of it, since the term 'being' is most appropriately [predicated] of this. Thus, the present question is reduced in itself to the question whose investigation has been pursued since the very beginning [of this science] and to which these things were premised[a] in the hope of understanding it [better], that is [the question] whether there is a separate substance which is the principle of sensible substances, or [whether] sensible substance is self-sufficient with respect to existence. The two questions [461] are one with respect to the object [of investigation], and two regarding the respect [in which this object is investigated]. Hence, clarifying one of them will clarify the other. Furthermore, in case it should turn out that there are more than one separate substances, it is, again, necessary that there is a [first] one among them which is the
q109 cause of their being multiple and countable. All this will become evi-
dent in the second part of this science, for the present consideration of
a108 these things has the function to prepare for this part [of metaphysics]
j121 which forms the aim of this [consideration] [462] (in view of the no-
bility of its [topic] some people thought that the divine science con-
m381v siders the separate things only).

So far now for the one in so far it is coextensive with being and for [the question] in which way one has to investigate its relation to the first one. As the one is opposed to the many, we have to consider [in what follows] in how many ways they are opposed [463]. We say: One and many are opposed in many ways one of which is [the opposition] of divisible and indivisible. This [opposition] seems to be of the [type of] opposition which is [found] between possession and privation, for the one is that which lacks the divisibility which is found in multiplicity [464].

Furthermore[b], the one is opposed to the many in terms of its specific properties [466], for the one has specific properties, namely [being] the

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a Omitting, with mss. *H, M*, and I. Mantino *innamā kāna* ('simply'), which is presumably an addition of a later copyist who read (erroneously) *wa-taqaddum hādhihi l-ashyāʾi* instead of *wa-tuqaddamu hādhihi l-ashyāʾu* and thus deemed it necessary to add a predicate.

b The transmission of the following ten lines, up to 'substance by necessity', is quite confused and lacunose in the Arabic manuscripts. The reconstructed text on which the translation is based can be found in note [465].

same in [the category of] substance, the like in [the category of] quality, and the equal in [the category of] quantity (in other words, one in substance is the same, [one] in quality is the like, and [one] in quantity is the equal), and the many has specific properties opposed to [these] specific properties of one, namely the other, the unlike, and the unequal. Now that which is opposed to the one *qua* same among these [properties] is otherness (for the same and the other are opposed to each other, which is why everything in the [category of] substance by necessity is either the same or the other). This still holds good when we take into account the [different] modes of predication of 'same' and 'other' enumerated [above] [467]. As we have said [there], 'the same' is predicated of the genus, the form, and the individual (providing it has two names, or the signification of its name refers [implicitly] to the signification of its definition)[a]. Furthermore, [it was said there] that the same by species, if [predicated] of a substance, is called 'identical', if [predicated] of a quantity, it is called 'equal', and if [predicated] of a quality, it is called 'like' (the latter holds good even for the [different] ways of predication of the term 'like' enumerated [above] [468]). Accordingly, anything must be either[b] identical or non-identical, or equal or unequal, or like or unlike; and all this amounts to that a thing is either the same or the other, [and this] either absolutely or under a [certain] condition [469]. q 110 j 122

Difference is not opposed to the same in the way the other is opposed [to it], for the other need not be other through something[c], whereas that which is different is different with respect to something. Difference admits more and less, whereas this is not admitted a 109

a After 'definition', a number of manuscripts adds 'and 'the other' is predicated of the opposites of these kinds [of predication]' (*wa-yuqālu ghayrun fī muqābilati hādhihi l-anwāʿ*, adopted by Amīn and Jihāmī), which seems to be out of place as Ibn Rushd continues his recapitulation of the modes of predication of 'the same'. The phrase is omitted in mss. *H, M*, and in I. Mantino.

b After 'either' ms. *M* adds 'the same or the other, or' *(huwa-huwa wa-immā ghayran immā)*, ms. *Q* adds 'the same' *(huwa-huwa)* neither of which makes sense in view of the continuation of the sentence.

c Reading, with ms. *Q*, *ghayran li-shayʾin*, similarly *ghayran bi-shayʾin* ('other in a certain respect') in ms. *P*. The remaining mss. have *ghayra l-shayʾi* ('[need not to be] another thing'). The same misreading occurs in the Arabic manuscript of Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1297, l. 10 (textus), p. 1298, l. 8 (lemma), corrected by Bouyges (cf. apparatus criticus).

by otherness[a]. This is so because that which is different is different [only] with respect to something, [that is] while being different in some respect, it is in another respect the same [as that from which it differs] [470]. Hence, multiplicity is not pure other[ness], but rather otherness in a certain respect, that is difference[b], whereas that which belongs to things which are mutually other cannot come together at the same time in the same respect in one and the same subject [471].

[All] these [things] are opposites, of which there are, in general, four types: contraries, possession and privation, affirmation and negation, and [opposite] relatives (in how many ways contrariety and possession and privation are predicated has been stated above). However, true contraries are [only] those which are found in one and the same genus, being that which is at the greatest [possible] difference and most remote distance. Things which are other in genus, on the other hand, despite being distant from one another, do not admit more and less in distance. Hence, their [way of] being distant from one another is different[c] from that of contraries, as [is shown by the fact] that more than one of them can come together in one and the same subject (such as things falling under the ten categories[d] which are separated by their genera). As a matter of fact, when these are said to be distant from one another, then [only] in the sense that they neither do come into being from one another nor are found together in any genus, but not in the sense that their being distant from one another is a kind of contrariety.

a110 q111 Contraries, on the other hand, are [things] which belong to one and the same genus[e], and they are at the greatest [possible] distance and

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a The Arabic text corresponding to 'in the way (p. 123, l. 23) ... by otherness' is omitted in ms. *H*, secluded by Amīn (p. 109, note 1), and ignored in the translations by Horten and Van den Bergh. The last sentence of this section ('Difference ... by otherness') has been transposed in I. Mantino's translation after the following sentence.

b The last sentence ('Hence ... difference') is transmitted in mss. *H* and *M* only.

c The Arabic text corresponding to 'admit ... different' is omitted by homoioteleuton in ms. *H*, secluded by Amīn (p. 109, note 12), and ignored in the translations by Horten and Van den Bergh.

d Reading, with the majority of the manuscripts, *ka-l-ashyāʾi l-llatī taḥta l-maqūlāti l-ʿashr* instead of *ka-l-maqūlāti l-ʿashr* in ms. *M* and I. Mantino or *ka-l-ḥāli fī l-maqūlāti l-ʿashr* in ms. *H* ('as [in the case of] the ten categories').

e Omitting, with mss. *M, P, Q*, and I. Mantino, *wa-ghayrun bi-l-ṣūrati* ('and

difference from one another with respect to form, which is why they cannot come together in one and the same subject and why the coming-to-be of one of them is by necessity the corruption of the other. Two j123
things having such a form—I mean [things such that] the coming-to-be of one of which is the corruption of the other—are in the most remote distance from one another with respect to being. Therefore, one says in defining contraries that they are those two [things] whose subject is one m382r
and the same while they are at the most remote distance from each other with respect to being[a]. From this definition it becomes evident that no contrary has more than one contrary, for if that which is complete in its genus is that beyond and above which there is nothing, the complete with respect to distance must be [that] nothing more remote than which exists [in that genus]. For suppose there is another thing contrary to it: this [must] be either more contrary to it with respect to being than the first [contrary] or less [contrary]. In the latter case, it would have the disposition of an intermediate between the two contraries and [thus] it would not be an extreme. But if it is more [contrary than the first one], then that which has been supposed [as being] at the end of [this] contrariety [actually] is not at its end, but rather an intermediate [472].

It is not possible that there are two things on one and the same level of contrariety at the greatest [possible] distance to another thing different from these two[b], for there can be no greatest [possible] distance except between exactly two ends which are at the greatest [possible] distance. This is why there can be no more than one straight line between two end [points] [473].

Since in the definition of contraries the [concept of] distance becomes evident, and [since] the term 'distance' is predicated primarily and *secundum prius* of quantity, the first contrariety must be contrariety in place, and this [contrariety] must be the cause of [the fact] that the remaining contraries exist in substances and that they exist together

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differ with respect to form') transmitted in mss. *G* and *H in textu*, in the remaining mss. *in margine*.

a The last sentence is omitted by homoioteleuton in mss. *M* and *Q* and secluded by Quirós.

b Reading, with all manuscripts except ms. *H*, *li-shayʾin ākharihimā*. Amīn follows ms. *H* which has *li-shayʾin ākhara* (but omits also the first three words of the following clause), whereas Quirós suggests to read *li-shayʾin ākhara mimmā* ('to another thing of those which [are at the greatest distance]').

[474]. If [there were] no [spatial] extension, it would be impossible that
q112 contraries such as hot and cold and the like existed simultaneously. Taking this into consideration, the presence of dimension in prime matter is a prerequisite[a] for the existence of contraries [in substances].

There are contraries one [or the other] of which must be [present] in the subject capable of receiving them (such as even and odd, one [or the other] of which must [apply to] every number), and there are con-
a111 traries both of which can be absent from [their] subject (as in [the case of] colours that which as capable of receiving black and white) [475]. Accordingly, there are two kinds of contraries, those which have no
j124 intermediate, and those which have an intermediate. Since change is always [change] from one contrary to the other, as has become evident in the *Physics* [476], by necessity there exists [in change] an intermediate between the two contraries[b], for the intermediate is that into which that which changes from one extreme to the other changes first [477]. E.g. change from black into white does not occur without previous change into one of the intermediates of these two [colours]. The intermediate and the extremes between which the intermediate [lies] must therefore necessarily belong to one and the same genus. Otherwise the intermediates could not be the first into which the change passes, for things belonging to distinct genera do not change into one another [478].

If extremes and intermediates belong to one and the same genus, it is clear that the intermediates are compounded of the extremes, for if they were not compounded, but rather a sort of combination—I mean, if the extremes existed in actuality in the intermediate in the way they exist individually—, then the [intermediates] would be identical with the extremes. But we have supposed that the intermediates are contraries only inasmuch as they participate in the contrariety of the extremes and, in general, that they are distinct from the extremes. All this is evidence of [the fact] that it is not possible that the intermediates are
q113 [themselves] extremes in pure actuality, or that the extremes inhere in them in pure actuality. Hence, inasmuch as extremes exist in the intermediates, they can exist simultaneously in one and the same subject,

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a *Sharṭan* in all manuscripts except ms. *H* and I. Mantino which read *huwa l-sababu* ('is the cause').

b The Arabic text corresponding to 'by necessity ... contraries' is omitted in ms. *H*, secluded by Amīn (p. 111, note 2), and ignored by Horten and Van den Bergh.

but this is not possible for them inasmuch as they are [actually] extremes and in accordance with their ultimate perfection. [Rather] the extremes inhere in the intermediates in a sort of existence intermediate between pure actuality and pure potentiality. Hence, the intermediate cannot exist except in things which are compounded[a].

There is therefore no intermediate between health and sickness because health is naturally not compounded with sickness, and one [or the other] of the two must be [present] in the subject capable of receiving them. For sickness is the evident disorder of the active or passive functions of the organs, whereas health is the lack of this disorder [480]. Between disorder and lack of disorder there is no evident intermediary, even though disorder admits more and less. Galen used the term 'intermediate' imprecisely[b] in referring to the state which is neither health nor sickness [481], for this state is by necessity either health or sickness (though not in [their] maximum)[c]. a112 j125 m382v

Hence, all that is referred to by negating both extremes must be conceived as truly intermediate. E.g. saying of dust colour that it is neither white nor black means exactly that it is an entity which lacks part of what is present in the two extremes (which are [together with it] under one and the same genus), while there exists in it[d] one thing by way of mixture of both extremes[e]. But if one refers by negating both extremes to a thing which does not [fall] under the same genus as the extremes, then it is not an intermediate [of these extremes], e.g. saying

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a The last sentence is omitted in ms. *H*, secluded by Amīn, and ignored in the translations by Horten and Van den Bergh; cf. also note [479].

b Reading *bi-tajawwuz*. The Arabic mss. have either *ya/tajūzu* ('is tolerable/possible'), which does not fit into the syntax of the sentence, or similar undotted versions which admit a great variety of possible readings none of which seems to make sense. I. Mantino translates 'largo modo' (fol. 382 va), which possibly points to the reading *bi-jawāz* or *bi-tajawwuz*. Cf. also note [481].

c The Arabic text corresponding to 'for this state ... maximum' is omitted in ms. *H*, secluded by Amīn (p. 112, note 6), and ignored in the translations by Horten and Van den Bergh.

d Reading, with mss. *G* and *M*, *wa-wujida lahā* instead of *wa-wujida lahumā* of the remaining mss. and *wa-wujūdun lahā* edited by Quirós.

e The Arabic text corresponding to 'while ... extremes' is omitted in ms. *H*, secluded by Amīn (p. 112, note 10), and ignored in the translations by Horten and Van den Bergh.

of a stone that it is neither speaking nor mute or of the deity that it is neither outside nor inside the world.

q114 This proprium marks off contraries from the remaining types of opposites, for for none of them there is what is truly intermediate. As for affirmation and negation, this is clear [482]. As for privation, as far as its [validity] has the same effect as negation, its disposition [with respect to intermediates] is the same as that of negation [483]. This concerns privation *qua* opposite of being, as when we say 'the existent comes to be from the non-existent'. As for the remaining types of privation, it is possible to imagine an intermediate between the two
a113 [opposites]. However, [this is] not a true [intermediate], as when we say of a newborn child that it is neither capable of seeing nor blind, or of a stone that it is neither speaking nor mute (but we have dealt with such [opposites] [484]).

As for [opposition of] relatives, there is naturally no intermediate between them in so far they are relatives, since relatives are not subject to the condition of pertaining to one and the same genus [485]. E.g. acting and being acted on: the one may belong to this genus, the other to that genus. However, as far as contrariety is a concomitant of relation, there might be an intermediate in the [relation], yet this [only] in so far it is a contrariety, not in so far it is a relation (e.g. the intermediates between small and great and between above and below).

j126 From these things it has become plain that these four types of opposites are distinct from one another, while it has [also] become evident that privation and possession are in a way the principles of contraries and of affirmation and negation [486]. This is so because coming-to-be is either from privation of form or from contrary form, while it is a necessary concomitant of the contrary form—despite being [itself] a contrary—to be deprived of the contrary which comes to be, for privation necessarily precedes that which is coming to be. Therefore, privation is a necessary concomitant of contraries and prior to them by its
q115 nature [487]. Moreover, it is a concomitant of either contrary to lack the other, and lacking [something] is being deprived of perfection (such as hot and cold, wet and dry)[a] [488]. As for negation, it is clear that it does not differ from this kind of privation, I mean absolute [privation].

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a The Arabic text corresponding to 'Moreover ... dry' is omitted in ms. *H*, secluded by Amīn (p. 113, note 6), and ignored in the translations by Horten and Van den Bergh; cf. note 488.

Since contraries, as explained, differ with respect to form while they are one in genus, we have to consider whether all contraries differ in form, or [whether] this is not necessarily [the case] [489]. We say: All contraries which are necessary concomitants of the thing's form differ necessarily in form, such as that which comes to be and corrupts and the eternal; for that which is subject to coming-to-be and corruption cannot inhere in the same form as the eternal. Otherwise there could exist eternal men [490]. On the other hand, contraries present in a thing a114
because of matter are by no means prevented from inhering in one and the same form, such as male and female inhering in one and the same species, and likewise white and black [491].

So far, our discourse has made clear what the concomitants of the one and the many are and that they are[a] the principles of the genera of opposition [492]. What has to be considered, therefore, is [the question] m383r
which kind of opposition is specific for them, for if there were no one, there would be no multiplicity, and if there were no multiplicity, there would be no opposition at all [493]. We say: The one and the many cannot be opposed by contrariety, for the contrary of the many is the few, but one is not few, since few is among the attributes of that which j127
is divisible. Rather being few is an accident of the one only inasmuch as the one is a divisible thing, but not in so far it is one. Moreover, if q116
the one were few, two would be many, for the few and the many are predicated by [mutual] relation [494]. As a result, the one will be a plurality [495], but all this is impossible. Also, it has been shown that it is the nature of contraries to have only one contrary, and that the two [contraries belong] to one and the same genus. But this does not apply to the one and the many [496].

As for [the question] whether they are opposed in terms of privation and possession, this has been a matter of dispute. One may indeed hold that, in so far the one is something indivisible and the many [something] divisible, the privation of divisibility, which inheres in the many, is the [necessary] concomitant of the [one] [497]. However, many of the ancients maintained that things are the other way round, I mean they conceived the many as the privation of oneness. What seduced them to

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a Reading, with mss. *D, M*, and I. Mantino, *wa-annahumā*, instead of *wa-ayyuhumā* ('and which of both are') in the majority of the manuscripts, or *wa-ayyuhā* ('and which are') in ms. *Q*; cf. also note 492.

this [position] was, as far as I can see, their opinion that privation, as a rule, is meaner than possession, and possession is nobler, and [that] this fits the relation of the one and the many, since the former is the cause of existence of the latter. But taken in this way things rather seem to
a115 suggest that the one is the privation of the many, for a lot of privations are nobler than the inferior existents, as at certain times not to see may be better than to see [498]. However, assuming that [the one and the many] are opposed in this way likewise entails a preposterous absurdity, namely that possession subsists in privation, since this holds good for the one and the many.

Therefore, we deem it more appropriate to conceive their opposition as pertaining to the type of [opposed] relatives, for the one is accidentally that which measures and the many that which is measurable, and measure and the measurable belong to the [category of] relation [499]. However, this [kind of] relation is not a substantial [property] of the one, but rather accidental to it [500], which is why the one is said to be
q117 related to the many in a way different from predicating [relation] of things mutually related to one another. [Rather,] the situation with this
j128 [relation] is similar to that of cause and effect: fire is the cause of fiery things but its being fire is different from its being cause. Accordingly, fire [belongs] to the category of substance in so far it is fire, and to the category of relation in so far it is cause (all this is self-evident). Similarly, the term 'many' does not seem to signify the [relation between the one and the many] in so far it has this relationship (although it does not subsist other than through this [relation]), but rather this term is predicated [relatively] only in relation to the few [501]. Hence, this relation between the many and the one applies to the many only in so far as this is measurable and to the one [only] in so far as it is that which measures.

Or else, we say that the one is opposed to the many by both modes [of opposition] in different ways [502], such that the many does not subsist[a] [in it] in so far as the privation of the many is accidental to it, but rather in so far it is the principle of the many (this being how they are opposed to each other as relatives), while the one is also opposed to

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a The Arabic text corresponding to 'by both modes ... subsist' is omitted by homoioteleuton in ms. *H*, secluded by Amīn (p. 115, note 13), and ignored by Horten and Van den Bergh.

the many in so far as this privation, I mean [the privation of] the divisibility which is found in the many, is accidental to it (this being how the [opposition of] possession and privation [applies to them]). a116

Furthermore, one may raise the following question: If one thing has only one contrary, how can the equal be opposed to the great and the small [503]? For if one thing has only one contrary, the equal cannot be a contrary of both. Moreover, the equal is in between the great and the small, whereas a contrary is not in between, but rather that which is in between is between contraries. This aporia can be solved by [conceiving] the equal as being opposed to the great and the small only by [being opposed to] the unequal, which makes [this opposition] an opposition between privation and possession [504]. m383v

Having dealt with the one and the many and their concomitants, we have to consider at the present place the finiteness of the four [kinds of] causes, i.e. matter, agent, form, and end, because this will be helpful both for proceeding to what we are searching for, I mean [our] search for the principles of substance, as well as for [better understanding] a lot of what has preceded. For this reason Aristotle set up postulates for this [search] in his first book on this science, that is the Book entitled *Small Alif* [505]. By finishing this task the first part of this science will come to its end, God willing. q118 j129

We say: If we assume [a series of] more than two effects, three and more [than three], presupposing the finiteness of their causes[a], they will evidently consist of three kinds [of effects]: first, intermediate, and last. To each of these there is something peculiar: to the last it is peculiar not to be a cause of anything whatsoever. To the intermediate it is peculiar to be both cause and effect, effect of the first, [that is,] and cause of the last (regardless whether the intermediate is supposed to be one or a finite plurality or something else, since it is the [peculiar] disposition of the intermediate *qua* intermediate, not of a particular intermediate, I mean a finite or an infinite [one]). And to the first it is peculiar to be cause only and—*qua* cause—not to be an effect of anything whatsoever. Its existence is opposed to [that of] the last, whereas the intermediate is like that which is compounded [of and] between the extremes. All this is self-evident. a117

a Reading *wa-faraḍnāhā mutanāhiyata l-ʿilal* instead of *wa-faraḍnāhā mutanāhiyata l-ʿadad* ('presupposing their [i.e. the effects'] numerical finiteness') in all testimonies including I. Mantino; cf. note [506].

But if we assume an infinite [chain] of causes for a certain last effect, we implicitly assume[a] an infinite [number] of intermediates. Now, intermediates *qua* intermediates, no matter whether finite or infinite [in number], require, as stated [above], a first cause in so far as they are effects. Otherwise, it would be possible that there are effects without a cause. But then assuming these intermediates to be infinite [in number]
q119 is self-contradictory, for intermediates necessarily have a first cause, while assuming them to be infinite entails the consequence that there is no first cause [for them] [507]. Furthermore, it is impossible that there is an intermediate without [there being] extremes. Positing [that] this [is possible] is like positing self-contradictory statements (such as positing an entity which is infinite in actuality). It has already become clear in the *Sophistical [Refutations]* that such [posits] are different from assuming the falsehood of the thesis [508].

The above proof, though [holding good] most specifically for efficient and moving causes, can be applied generally for the proof of the finiteness of [all] four [kinds of] causes. However, it might be more appropriate to prove this for each of the remaining [kinds of] causes
j130 separately by specific [arguments]. We therefore begin with the material cause, and say: Things are said to come to be from something else in two [different] ways. First, in the way we say that water comes to be from air, air from water, white from black, and black from white [509]. 'From' in these [cases] does not really mean 'after'[b], since that from which the coming-to-be actually takes place is the substrate of water,
a118 air, white, and black, not the form of water or the form of air, nor the white or the black itself. It rather has this meaning [only] in the sense that the form of water disappears from the substrate and is followed by the form of air [510]. In such [cases] it is not possible that that from which [a thing] comes to be is prior to that which comes to be, nor [can this] go on infinitely [511], for it is impossible to imagine the form of water as being prior to the form of air, or the form of air [as being prior] to the form of water. Rather they are together on one and the
m384r same level. Both have the same substrate, and each of them is in one

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a Lit. 'we have already assumed'.

b Reading *wa-min hāhunā fī l-ḥaqīqati laysa bi-maʿnā baʿd* instead of *wa-min hāhunā fī l-ḥaqīqati hiya (hiya* codd. : *innamā hiya* mss. *H M) bi-maʿnā baʿd* ('From' in these [cases] means in reality [+ only, *mss. H M*] 'after'); cf. note 510.

and the same way in potentiality or by disposition the other, which is why coming-to-be in these [things] is reversible.

The second way in which we say that one thing comes to be from another is [as follows]: the thing which is said to be [that] from which another [thing] comes to be exists actually [512] only in so far as it is disposed for becoming perfect through another thing and through another form, such that this substrate has existence only in so far it is moved to perfection through this later thing, as long as nothing prevents this [process of perfection]. E.g. the nutritive faculty which, in the fetus, is disposed to receive [the state] of the animal [soul], likewise the animal [soul] being disposed for receiving rationality. For in each of these [cases] we say that from the nutritive faculty the animal [soul] comes to be, and from the animal [soul] rationality comes to be; and similarly we say that from the boy the man comes to be. For this class [of things coming to be] it is very well imaginable that that which comes to be has more than one substrate in actuality. Unlike the first kind [of coming to be] this kind is characterized by [the fact] that what is later in it does not belong in potentiality to the substrate[a] [of that from which it came to be] and cannot change [back] into this [513]. [This is so] because that which is prepared is disposed for receiving the end, but the end is not disposed for receiving that which is prepared. q120 j131 a119

This shows that this kind of substrates [of coming-to-be] likewise cannot go on infinitely, for if that were the case, [one would have to assume that] there is an infinite [number of] things in actuality in that which is finite, no matter whether the substrates exist in the thing by pure actuality (as is the case with the nutritive faculty being the substrate of sense perception[b]), or whether they exist [there] in a state intermediate between potentiality and actuality (as is the case with the elements in homeomeric things). Moreover, it has been shown in the *Physics* that there is an essentially formless substrate [514], and such a [thing] cannot have a substrate, unless it had a form [which is self- q121

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a Reading, with ms. *H* and I. Mantino, *laysa huwa bi-l-quwwati li-l-mawḍūʿi* instead of *laysa huwa bi-l-quwwati l-mawḍūʿa* ('is not in potentiality the substrate') of the remaining manuscripts.

b Reading, with the majority of the manuscripts, *al-mawḍūʿati li-l-ḥiss* instead of *al-mawḍūʿati li-l-jins* ('the substrate of the genus') in ms. *H* and *al-mawḍūʿati li-l-janīn* ('the substrate of the fetus') in ms. *M* (adopted by Quirós and Amīn).

contradictory]. Now, if the first substrate and the last form are those which constitute the finite extremes in all [processes of coming-to-be of] sensibles, that which is between them must be finite, [too]. For it would make no sense to suppose things to be finite with respect to their extremes yet infinite with respect to their intermediates. This would be a self-contradictory thesis, since that which is infinite is infinite in every respect, not in one respect to the exclusion of another, as is clear when carefully considered.

As for causes which are ends, it is likewise clear that they do not go on infinitely, for positing this leads back to its negation [515]. [This is so] because if motion or progressing went on ad infinitum, infinite [meaning here that] the way does not come to an end, there will be nothing the motion or progressing goes to. Hence, it is futile and absurd [516]. This is impossible not only in cases where the end exists as a sequel of the motion but also in those cases which have an end intrinsic to their existence due to the fact that they are not subject to change, that is [in] things which are immaterial.

j132 As for form [517], it is likewise plain that it cannot go on ad infini-
a120 tum. As far as this concerns material forms which are in all parts of the world, it is as clear as is the finiteness of the substrates, for there cannot be an infinity of forms for a finite thing, nor can there be for it an infinity of substrates [518]. But the case is also evident with respect to the total of the world, for since its simple parts are like forms for one
q122 another, as has become plain in the natural sciences [519], these simple parts, being perfections for one another, cannot go on ad infinitum, as also the perfections cannot go on ad infinitum. E.g. earth exists only due to water, water due to air, air due to fire, and fire due to the
m384v heavens. Such [a series of] perfections cannot go on ad infinitum. Also, if we suppose forms other than those combined with matter which are perfections for one another, their finiteness can be shown by that very proof, I mean by taking into consideration [the argument] which has shown the finiteness of the final causes.

From this discussion it has become plain that the four [kinds of] causes are finite and that there is a most remote matter, a most remote agent, a most remote form, and a most remote end. As for [the question] whether the most remote cause in each [type] is one or can be more than one, this can be clarified as follows. As for prime matter, it has become plain in the *Physics* that it is one for the things subject to coming-to-be and corruption [520], and [that it is] due to this [fact that]

simple [bodies] can change into one another. As for the most remote agent, if this consisted in more than one agent, the term 'agent' would necessarily be predicated of them either univocally or by analogy to a meaning common to them. If it is predicated of them univocally, there a121
[must] be a genus common to them. Hence, the most remote agent would be something material [521], whereas it has become plain in the *Physics* that this is impossible (by 'agent' I mean [here] the most re- j133
mote moving [cause])[a] [522]. If, on the other hand, it is predicated of them by analogy to one thing, no matter whether their relation to this is on one level or on different [levels], this thing to which they are related[b] [must] be the first agent through which each of them becomes an agent. Thus, they would be effects [rather than causes], and none of q123
them would be a most remote agent. Therefore, the most remote agent must be one by necessity. The same proof shows that this [holds] likewise for the final and the formal causes, I mean that the most remote of these [kinds of causes] must be numerically one.

As it has become plain that there are exactly four most remote causes[c], we shall now consider [the question] whether it is possible that in each of these [most remote causes] the remaining [three most remote] causes, or some of them, are present [523]. We say: Concerning prime matter it has already become clear in the *Physics* that it is formless. Hence, it is not possible that it involves an efficient [cause], since the efficient [cause] is exactly that which supplies its effect with form. On the other hand, it must necessarily involve an end (which consists in form); otherwise there would exist that whose nature is not to exist [524].

As for the most remote efficient [cause], this must be immaterial inasmuch as it has to be eternal. Furthermore, it is necessary that it has form. Yet it is a matter of doubt whether it involves [also] final causality. For if we suppose that it has a final cause [distinct from it], it must be an effect of this [final cause], since the end is nobler than the

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a This parentheses is found in all mss., but omitted in Amīn's edition.

b Reading *alladhī tunsabu ilayhi*. Some manuscripts read *alladhī yunsabu ilayhi* ('this thing to which it is related'), which has been adopted by Quirós and Jihāmī, others are undotted. Only ms. *H* reads *alladhī nisbatuhā ilayhi* ('this thing to which they are related'), adopted by Amīn.

c The Arabic text corresponding to 'As ... causes' is omitted by homoioteleuton in ms. *H* and ignored in the translations by Horten and Van den Bergh.

agent. And since the [most remote agent] is immaterial, the final [cause] could be nothing else than the cause of its existence. Further, since we had supposed that the [agent] is the efficient [cause] of [the realization of] the end, and hence [that it] is a cause of the end, it would [have to] be the cause of itself. (This does not apply to material things, for [there] the efficient [cause] is cause of the end only in so far as these [things] are coming to be or material, while the [end] is cause of the [agent] in so far it is the end [of their coming-to-be].) And since
a122 [525] this is impossible, the only [alternative] left is that its end is its essence [526], like the scholar whose end in teaching [lies] solely in disseminating the good, or [like] the law[a] which moves men to virtue without thereby [itself] acquiring any virtue.

q124 By analogy, it becomes evident too that the first form has no effi-
j134 cient [cause], for if that were the case, it would not be the most remote form, for it would [have to] exist prior [to being the most remote form] in the efficient [cause] [527]. [Still] less appropriate is [the assumption] that it is material. If the [most remote form] has no efficient [cause], it [must] be one with the most remote efficient [cause] with respect to the substrate. For[b] if we suppose them to be numerically two, [the most remote form] must be caused by the efficient [cause]. Or else, the latter [must] be caused by the former in so far it has form, but then it would not be a first agent. Similarly, it cannot have a final [cause] either, for
m385r the end has form, so that there would be a form prior to it, hence it would not be the most remote form. If this is the case, its end [must] be its essence.

Therefore, it is impossible to posit a first final [cause] distinct from a first efficient [cause] and from a first formal [cause]. This [is so] because the first form and the most remote agent are one with respect to the substrate, as has become clear from this discussion, and [because] the most remote agent, as stated [above], cannot have an end distinct from its essence. Thus, this discussion has shown that all things go back to one [ultimate] cause which is end, agent, and form. We will show this, God willing, in a more specific way below.

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a *Al-nāmūs* in all Arabic manuscripts, but 'legũ institutor' (*wāḍiʿ al-nāmūs*?, νομοθέτης) in I. Mantino (fol. 384vb). The same example, again with reference, not to the law-giver, but to the law occurs below, p. 153 of the translation.

b Instead of *li-anna* Amīn reads *wa-abʿadu min hādhā fa-inna* without any manuscript evidence.

We have now reached the end of Chapter Three, and with its completion the first part of this science [of metaphysics] is complete. Praise be to the Lord manifoldly and eternally.

a123 j135

CHAPTER FOUR

q125 So far, it has been said that 'being' is predicated of all ten categories, that it is predicated of substance by priority and of the remaining categories by posteriority, and that the substance is the cause of the existence of the remaining categories. Furthermore, it has been said above that sensible substance is divided into matter and form both of which are again substances, in so far as the sensible substance is divisible into them with respect to existence[a] and constituted by them. And [it has been said] that the remaining categories are constituted by the category of substance, that universals and the intelligible [concepts][b] of these things have no extramental existence, that universals are not the cause of existence of their sensible particulars, but rather the particular form and the particular matter are the sole causes of the existence of the concrete substance. Furthermore, [it has been said] that that which[c] is brought about by an individual is another individual of the same or a similar species, and that the universal form and the universal matter are not subject to coming-to-be and corruption.

This is the level of knowledge about the principles of existence[d] reached in the preceding discourse. Since this discipline considers the relation of being to its first [and] most remote causes, we must consider
q126 [the question] whether these principles whose existence appeared in sensible substance (I mean matter and form) are sufficient for the existence of sensible substance, such that there is no separate substance causing the existence of sensible substance[e], or [whether] there is a
a124 separate substance which, being eternally in actuality, is the cause of existence of the sensible substance. And if so, [we have to ask] what
j136 kind of existence it has and in how many ways it is said to be the principle of sensible substance [528].

Moreover, [we have to ask] whether—just as it has become plain in physics that [all kinds of] matters come to an end in first matter

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a *Al-wujūd* in all Arabic mss., 'vniuersum esse' I. Mantino (fol. 385ra).

b Reading, with mss. *M, T*, and I. Mantino, *wa-ma'qūlātihā* instead of *wa-maqūlātihā* ('and the categories') of the remaining mss. (adopted by Jihāmī).

c Reading, with I. Mantino, *inna mā* instead of *innamā* (all Arabic mss.).

d *Al-wujūd* in all Arabic mss., 'vniuersi' I. Mantino (fol. 385rb).

e The Arabic text corresponding to 'such that ... substance' is omitted by homoioteleuton in ms. *M* and I. Mantino and secluded by Amīn (p. 123, note 9).

existing in something—so form [too] comes to an end in a first form existing in something, or [whether this is] a separate [form], and similarly [whether] this is the case with the first end and the most remote agent [529]. The most pertinent way of attending to this question consists in positing here, like a postulate, what has become clear in physics regarding the existence of immaterial movers [530]. In compliance with the [philosophers'] habit[a] we have to mention this here as a reminder, not because it is the task of this science to prove this.

So, we say: It has been shown in physics that each [thing] moved has a mover and that that which is moved is moved only with respect to something in potentiality, whereas that which moves moves with respect to something in actuality; and [it has been shown] that if the mover at one time moves, and at another time does not move, it is in some sense [itself] movable[b], since there is in it the potency to move while it does not [actually] move [531]. Therefore, assuming that there m385v
is a most remote mover of the world which sometimes moves, and sometimes not, necessarily entails [the consequence] that there is another mover prior to it, hence that it is not the first mover. And when we suppose that this second [mover] too at one time moves, and at another time does not move, necessarily the same thing will result for this [mover]. Thus, by necessity, this either goes on ad infinitum, or else we suppose that there is a mover which is absolutely immovable and which, by its nature, cannot be moved, no matter whether essentially or accidentally. If the latter is the case, this mover must be eter- q127
nal, and that which is moved by it must be eternally in motion too. For, if it were set in motion by the eternal mover at a certain time in potentiality [only], there would have to be another mover prior to the a125
eternal mover [532]. This is why the mover whose existence has been shown in [Book] XVI of [Aristotle's *Book of*] *Animals* is not sufficient as [sole] cause of motion, without the mover of the cosmos [533].

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a Lit. 'According to their habit' *(ʿalā ʿādatihim)*, probably referring to the tradition of Peripatetic commentaries, or else merely performative, in order to indicate that the following section is, strictly speaking, redundant.

b Reading, with mss. *H, M*, and I. Mantino, *mutaḥarrik* instead of *muḥarrik/muḥarrak* ('moving/moved') in the remaining mss. (adopted by Amīn and Jihāmī).

Now, if it is plain that there is eternal motion, and [if] eternal motion
j137 cannot exist other than as circular locomotion (as shown in physics [534]), it is clear that this necessarily implies that there is an eternal locomotion [535]. The only thing perceptible by the senses [fit] by this description is the motion of the celestial body. Hence, the motion of this body necessarily is an eternal motion, and its mover must be an eternal mover whose existence is [thus] shown by the [present] discourse.

That there is eternal continuous motion also becomes evident from considering time. For time is one of the concomitants of motion, as has been shown; and not even he who has utmost power[a] is able to create it. For if we suppose that it is created, it would be after having been non-existent, and it would have been non-existent before existing. But 'before' and 'after' are names of parts of time, so that time had to exist before it exists [536].

Furthermore, if time is created, there will be a concrete now prior to which there was no past time. But it is impossible to imagine a concrete now, being in actuality and present, unpreceded by any past, to say nothing of [the impossibility of] conceiving this by imagining the true nature of time [537]. Errors about this can occur only when we imagine time by its [graphic] illustration, the line[b]. For the line, when actually
q128 existing and in so far as it has position, must be finite and, a fortiori, can be conceived as being finite. Thus, when we conceive time too in this way, as if it were a straight line, it cannot be infinite [538]. Among the [various] kinds of fallacies, this kind of error belongs to the fallacy by inference and substitution [of concepts] [539]. Abū Naṣr [al-Fārābī] argues at length to this effect in [his treatise entitled] *The Changeable Beings* [540].

a126 If this is the case and it is evident that time is continuous [and] eternal, time must be something that follows one eternal [and] continuous motion, because [only] the motion which is truly one is con-

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a Following I. Mantino's translation 'in vltimo roboris' (fol. 385va), which points to *fī ghāyat al-quwwa* in the Arabic version. All Arabic manuscripts (pace Amīn) read *fī ghāyat al-qiḥa* ('utmost impudence').

b Reading, with mss. *D, G, M, Q, T*, *bi-muḥākīhi wa-huwa l-khaṭṭ* instead of *muḥākīhi wa-huwa l-khaṭṭ* (ed. Quirós), which makes no sense, and *bi-muḥākīhi wa-huwa l-khaṭāʾ* ('by its [graphic] illustration, which is a mistake') in ms. *A*, adopted by Jihāmī. Amīn follows ms. *H* the wording of which has the same meaning as translated above.

tinuous [541]. And if there is an eternal motion, there must be one eternal mover; for if there were many, the motion would not be one [and] continuous [542]. j138

That this mover is immaterial becomes evident from [the fact] that the motion it imparts is infinite in time, whereas any material mover necessarily has quantity—it is body or in a body[a] —, and each power [inherent] in that which has quantity (I mean a body) is divisible through the divisibilty of quantity and adherent to this [quantity] with respect to finiteness or infinity. This has been shown in physics [543], [and it holds good] independently of whether this power is [actually] diffused through the body and a natural part of it, as is the case with heat in fire and coldness in water, or [whether] it is [only] somehow m386r dependent on matter, I mean dependent [on it] as a necessary [prerequisite] of its existence, as is the case with soul. Since material forms cannot exist as something infinite in quantity, as has been shown in physics [544], it follows that there is no infinite material power of motion.

All this has been demonstrated in physics, and one should take it from there. [However,] it is possible to show this point regarding this mover here [in metaphysics] in another way. We say: If we suppose the first mover due to which the celestial body is in motion to be material, q129 it must be in a substrate different from the substrate it moves, and it must be [moving this] from outside. If this is the case, this body [(i)] either moves the celestial body by being conceptualized and imagined by it, as is the case in living beings, or [(ii)] it moves it through a natural power, as is the case [with natural movement] in space [545].

[(ii)] But that this [latter] is impossible is likewise clear. Let us suppose that the motion of this celestial body consists merely in being a127 attracted by natural impetus, for somebody might content this, and in order to refute it, it is not sufficient to say, as Ibn Sīnā did, that motion by natural impetus is nothing but [motion] from a non-natural disposition to a natural disposition [546]. For this applies only to the natural impetus of bodies moving in rectilinear motion, which is why rest is for these bodies like [their] natural disposition, whereas motion is for them a kind of accident. The natural impetus of this [celestial] body, on the

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a 'Or in a body' is omitted in mss. *H, T*, and I. Mantino, and in the translations by Horten and Van den Bergh.

other hand, clearly [would have to] be indifferent with respect to all directions [547], as it circles around a centre (this is why one says that it
j139 cannot be at rest). This might indeed be considered as a possible cause of this body's motion [548].

However, as soon as we suppose that this body cannot be other than animated, the impossibility of this [consideration] becomes evident. The reason why it clearly is animated is as follows: This [must be so] because it is evident with respect to this body that it is in eternal motion. Therefore, it must desire either motion itself or a concomitant of motion (namely providence for this world) or both together. For evidently it does not desire the end of motion, since in that case it would be at rest. Now, all that desires motion itself or a concomitant of motion is animated and desiring [on the basis] of concepts, since mo-
q130 tion is an activity of the soul. Without soul there would be only that which is movable.

This is [also] shown by what Alexander [of Aphrodisias] taught, namely that it is impossible that the noblest among animated [bodies] is non-animated. That the [celestial body] indeed is the noblest among animated [bodies] is [shown] by [the fact] that it governs them and is prior to them in nature; further by [the fact] that it is eternal, the eternal being nobler than what is not eternal [549]. Apparently, it even conceives that which is here [in the sublunar world], for otherwise, how could it possibly have this providence for the things here [in this world]? For that reason the ancients glorified it and looked upon it[a] as deity [550].

a128 But if it has soul, it certainly is moved by sensation or imagination or [by] conceptualization performed by the intellect. However, it cannot have sense perception, since sense perception is bestowed upon living beings for the sake of preservation [551] only, whereas this body has been shown to be eternal [anyway]. The same applies to imagination, for this too[b] is bestowed upon living beings for the sake of preservation. Moreover, there can be no imagination without sense perception [552]. [Furthermore,] if this body were moved by sense perception or imagination, its motion would not be one [and] continuous.

a Reading, with ms. *P* and I. Mantino ('ipsum', fol. 386rb), *annahū* instead of *annahā* ('upon them') in the remaining manuscripts.

b Reading *aydan* with the majority of the Arabic manuscripts and I. Mantino ('etiam', fol. 386rb). Mss. *H* and *M* read *innamā* ('only', preferred by Quirós and Amīn).

[(i)] This being the case, the only [alternative] left is that it is moved by desire [emerging] from intellectual conceptualization [553]. However, when we suppose the object of this conceptualization to be a body [554] (just as we say [that] the things here, I mean those below the lunar sphere, [are objects of its conceptualization]), this would necessitate that the perfection of that which is superior comes about through that which is inferior, which is absurd [555]. Furthermore, it is impossible to posit that its motion is caused by conceptualizing another, more superior celestial body, for stating the cause of the motion of that [other] body will entail the same [aporia] as in [the case] of this body, and, in consequence, the [number of] celestial bodies will increase ad infinitum [556]. j140 m386v

If this is the case, and it is impossible that this celestial body is moved towards another body, no matter whether this body is supposed [to be] superior or inferior, it remains only that it is moved by an object of desire which is superior to it, namely that whose existence is best in itself, for the object of [intellectual] desire is that which is best, and the [celestial body's] best object of desire must be the noblest of [all] objects of desire and the most perfect of all that is good [557]. This psychic motion is supported by the impetus it has by nature, for there is no obstacle between the natural impetus of this body and its psychic motion, as has been shown in the natural sciences [558]. q131

So, this is another [way][a] by which one can prove that this mover must be immaterial. However, the most specific and reliable method is the one we went through first, that is Aristotle's method. It is thus appropriate to posit here these things on the whole and to take them for granted from him who practises natural science [559].

What has to be considered at the present place regarding these principles, once their existence is taken for granted in this way, I mean in so far as they are immaterial [principles], is this: What kind of existence do they have? How many are they in number [560]? How are they related to sensible substance, I mean in how many ways are they the principle of [sensible substance] (for many [different] things are called principles) [561]? Furthermore, we shall consider how they are related to one another with respect to existence, I mean whether some of them a129

a Lit. 'one of the [ways]'.

are prior to others or [whether] some of them are independent from others, such that they have no causal relation between them, and if some of them are found to be causes of others, in how many ways they are cause[a] [562]. Moreover, we shall [try to] find out what things are
j141 common to [all of] them, in which way [they] are common to them, and
q132 how, in case we find out that some of them are causes of others, they differ in rank with respect to what is common [to them][b]. The [kind of] things which are common to them may be, for example, that each of them has intellect and perceives itself, that it is substance, alive, and one, and other such things, as will become evident below.

In general, the method of consideration here in this part [of metaphysics] will be the same as in the preceding part. For as we treated there the mutual relation between sensible beings in so far as they are beings—I mean [we proceeded] from the first of them [in knowledge] to the first [in existence][c] —and the relation of the things which are like their concomitants, so we will have to consider here this kind of being, then [also] the relation between that sensible existence and its concomitants and this intellectual existence. For if we proceed in this way, we shall have provided knowledge of beings *qua* beings *and* their most remote causes. Among Aristotle's treatises on this science, this part of the inquiry is covered by the one called by the letter *Lām* [564]. From what has been said [so far] it is clear that the knowledge of this part [of metaphysics] is like the completion and perfection of the first part of this science.

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a 'Cause' *(sababan)* is omitted in ms. *H* and secluded by Amīn (p. 129, note 3), while I. Mantino has the plural 'causae' (fol. 386vb).

b After 'common [to them]' most manuscripts add 'and if they are causes, in how many ways they are cause(s)' *(wa-idhā kānat asbāban fa-ʿalā kam jihatan takūnu asbāban/sababan)* which is obviously a doublet of the final part of the preceding sentence which has been inserted at the present place due to a lacuna in an early manuscript. Traces of this lacuna are found in mss. *M* and *Q* which omit, partly or entirely, the present sentence ('Moreover ... common [to them]'). Mss. *H* and *M* add only the last part of this doublet ('in how many ... causes'). The doublet has been included in the editions by Quirós and Jihāmī, but is secluded in the above translation.

c This parentheses, *aʿnī min qibali l-awwali minhā ilā l-awwal*, is omitted in mss. *H, M* and in I. Mantino, and secluded by Quirós and Amīn, but attested in all other manuscripts. Provided my interpretation is correct, it is not very likely that we are faced with an interpolation by a scribe. However, it may stem from a gloss by a scholar familiar with Ibn Rushd's *Long Commentary on the Metaphysics*. Cf. also note [563].

Having clarified by this discussion what the present consideration in this part of the science aims at and what it is searching for, we should now begin with the detailed inquiry. We say: It becomes plain from the natural sciences[a] that the principles to which this description applies are a130
more than one. For the mover which has been verified in the preceding discourse is distinct from the mover whose existence has been shown in [Book] XVI of the *Book of Animals* [565], since the former is prior in nature to the latter. This [is so] because this latter needs that former in m387r
order to set [something] in motion. If the former did not prepare for the j142
[latter] its substrates on which it acts, it could not effect anything, as q133
shown in the natural sciences [566], whereas the former is not in need of the latter in order to set [something] in motion. Moreover, it is evident from sense perception that the celestial body performs many [different] motions [which look] like partial motions of that which is moved by the greatest motion, as if the moving celestial spheres would be parts or like parts of the greatest celestial sphere. As shown in the natural sciences, they [all] pertain to one and the same substance and are without contrary; hence all of them are necessarily eternal [567]. Also, the parts of that which is eternal are [themselves] eternal. Now, if these celestial spheres, which are part of the greatest body, are eternal—for it has already been shown that this uniform motion, i.e. the diurnal [motion], is eternal[b] —, their motions must be eternal too, and the same, I mean that[c] they are eternal, [must apply] also to their movers which belong to the genus of the mover of the cosmos.

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a I follow mss. *H* and I. Mantino which read *min al-ʿilm al-ṭabīʿī.* This is confirmed by the two subsequent references to the natural sciences which seem to point to Ibn Rushd's commentaries on the *Physics* and *De caelo* (cf. notes 566, 567). The remaining mss. read *min al-ʿilm al-taʿālīmī al-nujūmī* ('from mathematical astronomy'). This reading has been adopted by Quirós and Jihāmī.

b The last clause, 'for ... eternal', stands in all Arabic manuscripts and in Mantino's translation before 'Now, if these celestial spheres...', thus forming a subordinate causal clause of the preceding sentence ('Also, the parts...') where it makes obviously no sense. This disorder must have been caused by the omission of the clause in question through the homoioteleuton *azaliyya* and the subsequent misplaced insertion of a marginal correction of this omission. All editors of the Arabic text followed the corrupt wording of the manuscripts.

c The Arabic text corresponding to 'the same, I mean that' is omitted in ms. *H* and I. Mantino and secluded by Quirós and Amīn.

As for the number of these motions and [of] the bodies moved by them, this should be taken for granted here from the discipline of mathematical astronomy [568]. Of these [doctrines] we shall assume here those which are most widely accepted in our days, that is those which are undisputed among the specialists of this discipline, from Ptolemy up to the present time, while we leave [the solution of] that which is disputed among them to the specialists of that discipline [569]. Actually, a lot of what concerns these motions cannot be determined other than by employing generally accepted premises, since the determination of many of these motions requires a span of time many times as long as a man's life. Generally accepted premises of a discipline are those which are undisputed among its specialists, which is why we rely on some of these premises at the present place [570].

a131 q134 We say: There is a consensus that there are thirty-eight [different] motions of celestial bodies [571], namely five each [performed] by the three supra[-solar] stars, Saturn, Jupiter, and Mars, five by the moon, eight by Mercury, seven by Venus, one by the sun (provided we regard j143 its course as [pertaining] solely to an eccentric sphere, not as [pertaining] to an epicyclic sphere [572]) and one by the all-embracing sphere, i.e. the sphere of the fixed stars [573]. It is not clear whether there is a ninth sphere. Ptolemy thinks that there is a slow motion of the zodiac different from the diurnal motion [and that] it completes one revolution in thousands of years. Others maintain that it [performs] a motion of accession and recession, namely our fellow countryman from Andalusia called [Ibn] al-Zarqāla and his adherents, who assume for this [theory] an orbit which accounts for this motion [574]. What motivated them to establish this [kind of] motion was that they observed the [annual] return of the sun to certain points of the zodiac and found that they had changed [575]. Again others maintained that this change is due to an acceleration of the [sun's] motion or [a combination of several] motions in the sphere of the sun [576]. Still others maintained that this [change] originates from defective instruments or that the instruments as such are insufficient to observe the true nature of this [phenomenon] [577].

On the whole, I consider the existence of such a ninth, starless sphere as far-fetched, for a sphere exists only for the sake of the star which is the noblest of its parts. This is why the more stars [a sphere] has, the nobler it is, as explained already by Aristotle [578]. The noblest sphere is the one which performs the greatest motion. For that reason, we a132 regard it as unlikely, or rather impossible, that it is starless. This is one

of the things we have to keep in mind during our investigation of the cause of this motion.

But we have digressed from our subject. So, let us return to where we were. We say: If we suppose the number of motions to be this, there must be an equal number of movers, since every motion they perform originates from a desire peculiar to them, and a peculiar desire is [a desire] for a peculiar object of desire [579]. Such [is their number], when we suppose that there is [only] one mover for the diurnal motion of all spheres [together]. But when we regard this motion in such a way that every single sphere has its [own] peculiar mover for this [diurnal motion], the number of [celestial] movers will amount to forty-five. Prima facie, this seems to be what Aristotle teaches [580]. However, Alexander [of Aphrodisias] states explicitly a different view in his treatise known as *On the Principles of the Cosmos* [where] he considers [only] one mover for these [diurnal][a] motions of all spheres [together] [581]. And indeed, it is an unsettled question which of the two views is more appropriate and suitable [582]. q135 m387v j144

For if one assumes, following the custom of the mathematicians, specific spheres for each of the seven stars, on which they perform this motion, I mean the diurnal [motion], it will be most appropriate to posit a specific mover for each of them in this—the diurnal—motion. Otherwise, nature would have produced [these spheres] in vain, for to posit a [specific] sphere without a specific motion performed on it would be otiose. However, if we assume then this to be the case, this diurnal motion is no [longer] a truly uniform [motion], since it does not originate from one mover, but rather it merely happens to be synchronous, whereas in itself it is [a combination of] many motions [performed] at different distances [from the centre] and [originating] from different movers. According to this assumption [the motion] would be [only] accidentally one, for [the phenomenon] that motions of things moved with different acceleration and deceleration are essentially one and at the same time, occurs only in parts of spherical solids. [Moreover,] if that which is by accident cannot exist eternally or for the most part in the things of this world, how much less possible will this be in the case of the celestial bodies [583]? a133 q136

a 'Diurnal' is missing in mss. *H, M* and I. Mantino, but present in all other mss. Possibly it is an addition by a later scribe. In any case, it is exactly what Ibn Rushd had in mind (cf. some lines below).

If all this is the case, a motion which is essentially one occurs [only] in one [thing] moved, and the one [thing] moved is set in motion by one mover only. Hence, it is most appropriate to regard the celestial sphere in its entirety as one ball-shaped living being with the sphere of fixed stars as its convex [side] and the [sphere] bordering the sphere of
j145 fire as its concave [side] [584]. [This living being] has one total motion as well as the motions [performed] by each single star which exist in it [by way of] particular motions. Its greatest motion is like the movement of locomotion in living beings, while its particular [motions][a] are like motions[b] of the limbs of a living being [585]. This is why these motions do not require that the centres around which they revolve are of the type of the earth [*qua* centre] of the greatest motion [586], for [as] shown by mathematics the centres of most of these motions lie outside the centre of the world, [furthermore] they do not have the same distance from the earth. Accordingly, we must not imagine a multiplicity of mutually discrete spheres concentric with the centre of the world and with poles identical with the poles of the world, but rather we [should] imagine bodies between the specific spheres of each star, such that they are not discrete from one another [587]. [Furthermore, we should imagine] that they are not moved essentially, but rather due to their being parts of the whole, and also that the stars perform the diurnal motion on these bodies.

q137 The above assumption does not entail any absurdity, for what
a134 prompted those who practise mathematical [astronomy] to posit for each of the seven stars separate spheres on which they perform the diurnal motion [and which are] distinct from the spheres specific to their [individual] motions was their [principle] that one moved thing
m388r cannot move with two different motions, being one [thing] moved on [an orbit with] one size. And this very [principle] is consistent with the position we just took into consideration, for these spheres perform motions peculiar to them on spheres peculiar to them as well as a common motion in so far as they are parts of the greatest body, [and this] not in so far as these parts are moved essentially, but rather due to their being part[s of the whole].

a Reading, with ms. *H* and I. Mantino ('eius', fol. 387 vb), *wa-l-juzʾiyyātu minhu* instead of *wa-l-juzʾiyyātu minhā* ('while the particular [motions]') of the remaining manuscripts.

b Reading, with ms. *H, M,* and I. Mantino, *ḥarakāti* instead of *ḥarakata* ('the motion') of the remaining manuscripts.

As for the question how these parts follow each other [in this motion starting] from a single moving cause, even though they are distinct, as well as how [it comes that] they do not mutually impede [their motions][a], we have addressed this in *De caelo* [588]. [One might ask] whether it is possible, as assumed by some people, to posit a number of movers less than this, such that we assume only one mover for each sphere by which first the star [of that sphere] is set in motion, from j146
which star powers then emanate appropriate for the [various] motions peculiar to this star, these [motions] being for the sake of that [single mover] [589]. However, [it is clear] from what has been said before as well as from what follows [that] this is impossible. For when we assume that these spheres are set in motion solely through conceptualizing immaterial things, clearly the remaining movements found in each of the stars originate neither from conceptualizing [this] star nor from desiring it, as is clear from what we said [above]. Furthermore, there are no powers emanating from the star to the remaining parts of its spheres[b], since the only part of the soul found in them is the kind which consists in intellectual conceptualization.

As for [the question] whether the number of these substances can be q138
greater than the number of these celestial motions, this is not impos- a135
sible. However, when we assume that there is another such principle, other than those enumerated, then this principle must have some proper function. Either it will be a principle of one or all of those principles, as we will show later on regarding the first principle, or it will be a principle for some of the things of the sublunar sphere, as is the case with the agent intellect. For it is impossible that any of these noble principles exists without any activity, as it is impossible that no ignition originates from the essence of fire. These principles are by nature active [principles], just as the sun generates light by its nature. Further-

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a *'Lā tataʿāwaqu'*, transmitted in mss. *M, P*, and I. Mantino, seems to be the only reading which makes at least some sense (cf. note 588). The remaining manuscripts read *lā tatafāraqu* ('they do not separate from each other'), except ms. *Q* which has *lā tataʿārafu* ('they do not know each other').

b Reading, with the majority of the manuscripts, *mina l-kawkabi ilā sāʾiri ajzāʾi aflākihī*. Ms. *M* and I. Mantino read *mina l-kawākib* ('from the stars') instead of *mina l-kawkab*. This variant was adopted by Quirós and Amīn who, as a consequence, had to change, without any manuscript evidence, *aflākihī* into *aflākihā* ('of their spheres').

more, if there were among them a principle without activity, nature would have acted in vain [590]; and [this holds good] even if their existence is not by first intention for the sake of their activities, but [only] by second intention [591], as will become clear [below]. In any case the same is true [of them], I mean that there is no inactive principle among them. Hence, we should restrict [our] discourse here to [stating] that their number is finite and that it is impossible for there to be inactive principles.

Having clarified this with respect to the number[a] of these principles
j147 we shall now consider their mode of existence as well as how they cause motion and in how many ways they are principles of these visible[b] divine bodies. The [best] method for addressing these [questions] is positing here what has been shown in psychology, for most of the principles to be employed in this issue are taken from this science; and obviously there is no way to acquire knowledge of the specifics of this type of existence, unless one has previously acquired knowledge of this science [592]. For that reason it says in the divine law "Know thyself
q139 and thou shall know your creator" [593]. We say: It has become clear in
a136 that science that forms have two modes of existence, one sensible or
m388v quasi-sensible (this mode of existence they have inasmuch as they are in matter), the other intellectual (this mode they have inasmuch as they are separated from matter). Consequently, if there are forms which have existence inasmuch as they are not in matter, these must be separate intellects, since there is no third [mode of] existence for forms *qua* forms [594].

As it is clear that these moving [causes][c] exist only in so far as they are intellects, we should now consider [the question] how they set the

a As proposed by Van den Bergh and Amīn (p. 135, note 8) I follow I. Mantino ("de numero", fol. 388rb) in reading *ʿadad* instead of *wujūd* ('existence') transmitted in all Arabic manuscripts.

b *Maḥsūsa* in all manuscripts except *M* and I. Mantino which read *samāwiyya* ('celestial'). The latter reading is adopted by Quirós and Amīn, but *maḥsūsa* is the lectio difficilior and supported by what follows.

c Reading, with mss. *D, G, Q*, and *T*, *hādhihi l-muḥarrikāt*. This reading seems to be confirmed by 'motores' in I. Mantino (fol. 388va). The remaining manuscripts read *hādhihi l-ḥarakāt* ('these motions') which makes no sense (nevertheless adopted by Quirós and Amīn). The reason for the scribal error (or intended "correction") is that Ibn Rushd, when speaking of a plurality of movers, usually employs the pluralis sanus masc. However, the present formation of

celestial bodies in motion. There is no way [for this to happen] other than by intellectual conceptualization followed by desire, as the form of the object of desire moves the desirer [595]. This being the case, the celestial bodies must have intellects because they conceptualize [forms]. This [argument] is a demonstration of cause and of existence [596]. Furthermore, as there is no [self-]movement except in association with desire, they must have rational desire; and this will be the only part of the soul they have. For it is impossible that celestial bodies have sense perception, because the living being is endowed with sense perception only to guarantee its preservation, whereas these bodies are eternal. Likewise, they have no imaginative faculties, as maintained by Ibn Sīnā, since imaginative faculties cannot occur [in living beings] without sense perception, as has been shown in psychology [597]. The j148
purpose of the imaginative faculties consists only in moving the living being through objects of sense perception after the latter have disappeared. In most cases this is for the sake of preservation, too. Moreover, if what Ibn Sīnā says about celestial bodies were true, namely that q140
they imagine the positions to which they change [598], their motion would not be uniform [and] continuous due to [the fact that] different objects of imagination and different [correlate] dispositions of theirs succeed one another. Rather, the positions are somehow accidental to them and by relation to one another. For the inclination present in [the plane of] the sun's motion emerges only from the position of its sphere in relation to the greatest sphere.

If, then, it is impossible that these bodies have imagination, they will not have particular motions; rather their motions will be uniform and a137
continuous, as I shall explain [next]. This [must be the case] because when they conceptualize the good whose conceptualization constitutes their perfection, they desire to become similar to it in perfection, and this in order to achieve the best possible state of existence attainable for them. Since being in motion is better for them than being at rest (for motion is in a way life for natural things [599]), they are eternally in

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the plural is not a unique case, but attested also in other texts, especially in the wider sense of 'moving causes', e.g. *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 22, l. 11; *Long Commentary on the Metaphysics*, p. 1653, l. 13; cf. also *ibid.*, p. 1594, l. 2 sq. For further occurrences in the present text cf. Quirós, p. 156, l. 2, 157, l. 4, Amīn, p. 151, l. 3, p. 152, l. 1, Jihāmī, p. 161, l. 17, p. 162, l. 18, below, p. 165–7 of the translation.

motion [600]. However, this does not mean that their conceptualization is for the sake of motion, for if that were the case, the better would be for the sake of the worse. Rather, this means that [their] motion is consequential to this perfection, following it in the way ignition follows the form of fire. As it is the best for us, once we have achieved the utmost perfection, to let benefit others from this perfection as far as possible, while [seeking] our perfection itself is not for the sake of something external, so is the case with the celestial bodies with regard to what is below them, as we will explain below [601].

From this discussion it has become plain what kind of existence these movers have and how they set [something] in motion. From this it is clear that they not only move the celestial bodies but also provide them with their forms through which they are what they are. For when
q141 we deny their existence, there would be no forms of the rotating bodies,
j149 just as there would be no utmost perfection for us, when we deny the
m389r existence of the intellect in actuality. Consequently, these [movers] are, from this point of view, in a certain way the efficient [causes] of the [celestial bodies], since it is the efficient [cause] which provides the substance of a thing, no matter whether it acts eternally or discontinuously (to act eternally is [of course] better). Meanwhile they are, from another point of view, formal [causes] for them, for the forms of the celestial bodies are nothing else than that which the [celestial bodies] think of these [movers]. And [finally] they are also final [causes] for them because the [celestial bodies] are moved by them by way of desire, as explained [above].

a138 This being the case, these principles serve as form, agent, and end of this sensible existence [of the celestial bodies]. Therefore, sensible existence does not emerge[a] from them in such a way that they are for the sake of this [sensible existence], but rather this is for the sake of them, as has become clear from this discussion. And if this is the case, [sensible existence] can emerge[b] from them only by second intention [602]

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a Reading, with the majority of the manuscripts, *laysa ṣudūru l-wujūdi l-maḥsūs* instead of *laysa ṣuwaru l-mawjūdi l-maḥsūs* ('the forms of sensible being are not') in ms. *H*, and *laysa ḍarūriyyu l-wujūdi l-maḥsūs* ('there is no necessary sensible existence') in ms. *M*. The latter reading has been adopted by Quirós, while Amīn edits *laysa ṣudūru l-mawjūdi l-maḥsūs* ('sensible being does not emerge').

b Reading, with the majority of the manuscripts, *yakūna ṣudūruhū [*i.e. *al—*

and in the way we say of the law that it communicates virtue to man without seeking to acquire virtue in itself. Evidently, there are two kinds of beings, one prepared to serve something else, such that the [latter] is its end, and the other completing and perfecting something else by governing [it], not by being for the sake of it. These two kinds are found in habitual dispositions and in voluntary acts of production [603].

Having clarified in how many ways the separate [entities] are principles of sensible substance and how they are related to it, we must now consider the question how these principles are related to one another and whether they pertain to one and the same level of existence, such that there are more than one principle of the world, or [whether][a] they stand in a causal relation to each other and finally go back altogether to q142
one principle which is the first in this genus and prior to all of them, while these remaining [principles] are principles only inasmuch as they benefit[b] from this [first] principle. And if the latter is the case, [we further have to ask] in how many ways some of them are principles of the others and the first is the principle of all of them.

We say: Considering their case carefully, one will find that some of them are prior in nobility to others, for evidently the moving cause of the diurnal motion is nobler than all others, since these are altogether j150
moved by it accidentally, whereas it is not moved by them. Furthermore, that which has the quickest motion and the largest body is necessarily the noblest [604]. On the other hand, if one considers the case of the other [movers] carefully, one will find that they are disparate in this respect [605]. Now, if things are disparate in virtue without being dis- a139
parate in species (I mean such that they constitute a multiplicity of species, one of which is more virtuous than the other), the difference found in them [emerges] only from [the fact] that some of them are

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wujūd al-maḥsūs] instead of *yakūna ṣudūruhā* ('they can emerge') in mss. *H* and *M*, adopted by Quirós and Amīn.

a *Am* in all Arabic manuscripts except ms. *H* which has an omission by homoioteleuton at the present place, and ms. *M* which is almost illegible. Quirós and Amīn replace *am* by *wa-* ('and'), without any manuscript evidence.

b *Bi-mā stafādat* in all Arabic manuscripts except ms. *G* which reads *bi-mā stafādahū* ('through that which it derives'). Possibly, I. Mantino represents the correct reading. The translation "per id quod acquirunt" (fol. 389rb) points to *bi-mā stafādathu* in the original.

prior to others with respect to one thing[a] shared by them. Things of this kind are necessarily causally dependent upon one another; and that which is prior to all others in this respect is their most remote cause and the cause of the existence of all others [606]. If that is the case, while it has already become plain that the noblest of these movers is the one which causes the diurnal motion, then this mover must be the most remote cause of all other [movers].

This also becomes plain from [the fact] that[b] the remaining movable [celestial entities] share the motion of this mover and are set in motion by it, in other words they share the conceptualization of this [mover] [607], such that each of them has a general, i.e. a common, conceptualization as well as a [conceptualization] peculiar to it. The general [conceptualization] consists in each [movers'] conceptualization of this [first] mover, the peculiar one consists in each [movers'] individual
q143 conceptualizations of each single mover. In the present case, this generality cannot be related to that which is peculiar to each of them in the
m389v way genus is related [to species] because these objects of conceptualization are immaterial. Rather, it is related to this as things are related to one thing which is prior to them and the cause of their existence. Moreover, the general is prior to the peculiar, for if the general is abolished, the peculiar is abolished [too] [608]. But if this general conceptualization cannot precede [the peculiar conceptualization] by generic priority, it must be prior to all other objects of the [movers'] conceptualization by causal priority.

By analogy, this will evidently also apply to the multiple motions of
a140 each star. For since it is evident that these motions are only for the sake of the motion of the star, the moving causes of these [motions] must be for the sake of the motion of the star. Otherwise, the motion of the star
j151 would emerge from them accidentally. If all this is the case, then the

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a *Fī l-shayʾi l-wāḥid* in all manuscripts except ms. *H* and I. Mantino (fol. 389rb) which read *fī l-nawʿi l-wāḥid* ('in eadem specie'). This reading has been adopted by Amīn.

b Reading, with the majority of the manuscripts, *wa-qad yalūḥu ayḍan hādhā min anna*. In ms. *M 'min'* is omitted (thus, the meaning is 'Likewise, the following becomes clear, [namely] that'). A later scribe erroneously inserted the omitted *min* after *ayḍan*, which is why Mantino's translation reads "Declaratum quoque fuit ex hoc, quod," fol. 389rb). Quirós secludes *min*, Amīn follows ms. *H* and secludes *hādhā min*.

movers of all stars with more than one motion must be caused by the mover of that star, while the movers of the seven stars [themselves] are caused by the mover of the greatest sphere [609].

To this degree this [method of] discourse can establish the existence of a first principle among this kind [of entities]. This does not preclude that it might become plain later, when we consider the specific properties of each of these [entities], that such a mover does not suffice to be a first principle. [However,] that these separate [entities] necessarily come to an end in a first principle and that they are not independent q 144
from one another to such an extent that there would be no causal nexus between them, this might become evident from a more general argument than the preceding one, as follows.

The term 'principle' can only be predicated univocally, by pure equivocation, or by order and analogy (that is the kind of terms predicated with reference to one thing [610]). Now it is impossible that it is predicated univocally because in what is predicated univocally multiplicity is found only due to matter, whereas these [entities] are without matter. Neither is it possible to predicate the term 'principle' of these [entities] by pure equivocation, as it has become clear that they are of the same kind. Consequently, the term 'principle' must be predicated of them *secundum prius et posterius*. And things predicated *secundum prius et posterius* are necessarily related to one thing which is the cause of existence of [what is intended by] this meaning for the remaining things. E.g. the word 'heat' is predicated of hot things inasmuch as they are related to fire as the cause of the existence of heat in all other hot things. Thus, it is evident that these principles must go back to one [first] principle. However, [this] does not become plain in such a specific way [611] as in the preceding argument[a].

The issue might become evident from still another [argument]. We a 141
see that the activities of these celestial bodies emerging from their motions assist each other with regard to [their influence on] the existence and preservation of each single being in the present world, such

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a In ms. *M* and I. Mantino the last sentence is followed by what seems to be an interpolated gloss or an alternative version of this sentence. The Arabic text says "no matter whether they occupy one and the same level in their relation to this or whether they are subordinated to one another. This neither becomes as evident from this argument as it has become evident for some of them in the preceding argument," cf. Quirós, p. 144, l. 17–19, I. Mantino fol. 389 vb 17–21.

j152 that if one of these motions were abolished, the existence of [these] things would become defective and their system would be spoiled [612].
q145 This is why the motions of the moon and the erratic stars seem to serve the sun and to be subject to its influences[a]. For they are always found to move on fixed sections of their course (I mean with [the same] acceleration and deceleration) in fixed distances (I mean nearness and remoteness) from the [sun], as is shown in the science of mathematical astronomy[b]. They cannot have such an activity by accident; and if that is the case, they must direct themselves in their motions towards one end. Since their existence is not for the sake of the things in the present world, this common end of theirs [must] be the cause of their mutual accord and assistance with regard to [their influence on] each single
m390r being in the present world. For if the existence of an effect [emerges] from more than one moving cause, it is essentially brought about jointly due to [the fact that] these moving causes share one [common] end. This is indicated by the word of God (exalted and mighty): "If there were therein gods beside Allah, then verily both [the heavens and the earth] had been disordered" [613].

On the whole, the world is one because [it has] one principle[c], otherwise its unity would be accidental or it would follow that it does not exist [at all] [614]. In sum, the disposition of the world is similar to that of the city-state [ruled by] an aristocracy, for although its leadership is

a Reading, with the majority of the manuscripts, *wa-tataqabbalu āthārahā*. On the basis of the undotted text of ms. *M*, Quirós reads *wa-tanqīl āthārihā* ('and the transmission of its influences'), whereas Amīn (p. 141, note 1) proposes to read *wa-tataqayyalu āthārahā*, the meaning of which he gives as 'and they follow its tracks'. I have not been able to find references for such a meaning of *taqayyala* (basic meaning: 'to hold siesta'). However, this reading seems to be supported by ms. *Q*, and I. Mantino's translation ("eumque insequi," fol. 389vb) points to the meaning indicated by Amīn. On the other hand, the reading *tataqabbalu* is confirmed by a parallel passage below; cf. Quirós, p. 168, l. 7, Amīn, p. 161, l. 17 and note 13 (again Amīn proposes to read *taqayyul*), Jihāmī, p. 171, l. 2.

b The translation of this sentence follows the edition by Amīn. Quirós has a slightly differing text based on ms. *M*. Jihāmī's edition is partly wrong, partly lacunose.

c Reading *ṣāra l-ʿālamu wāḥidan li-mabdaʾin wāḥidin* instead of *ṣāra l-ʿālamu wāḥid al-mabdaʾ wāḥid* ('the world [which has] one principle is one'?) in most manuscripts. Quirós and Amīn follow ms. *M* which reads *ṣāra l-ʿālamu wāḥidan bi-mabdaʾin wāḥidin* ('the world is one by [having] one principle').

multiple, it forms one leadership directed towards one end; otherwise it would not be one [615]. As the continuance of the city-state depends on this [leadership], so is the case with the world. For that reason household city-states are easily perishable because their unity is only somehow accidental [616].

It is now plain what kind of existence these principles have and how they are related to the sensible world and to one another. Hence, we a142 q146
shall now consider the things proper to them, proceeding in what follows, as already stated, from what has become clear in psychology [617]. We say: That each of these principles thinks itself is clear from the j153
following: Since this is the nature of our intellect—I mean that it happens to return [to itself] and, thus, think itself, when it thinks intelligible things because its essence is the intelligibles themselves—, consequently, if the intellect in this [world] coincides with [its] intelligible, how much more will the same apply to these separate intellects? For if this is a peculiarity of our intellect inasmuch as it is not imprinted in, but nevertheless connected to matter, this will all the more apply to the separate intellects which are not at all connected to matter. Consequently, what is meant by coincidence of intellect and intelligible applies to them more than to us. For even though our intellect is the intelligible itself, there is a certain change in it due to its relation to matter.

As it has become plain that each of these intellects perceives itself, we have now to consider whether or not each of them can think anything outside itself. We say: It has been shown in the book *On the Soul* that the [actual] intelligible is the entelechy and form of him who is able to think [618]. Hence, if we assume that one of these [intellects] thinks something other than itself, it reaches its entelechy through thinking this. Thus, this other [thing] must be prior to it and the cause of its existence. Likewise, if we assume that some of these [intellects] are caused through others, that which is caused must conceptualize its cause, so that these two meanings become convertible, I mean that if these principles conceptualize something other than themselves, this other [thing] must be their cause, and that if these [principles] have a cause, that which is caused must conceptualize this [cause]. For that q147
which is caused cannot conceptualize its own essence without conceptualizing that which constitutes its essence. Having shown that each of a143
them conceptualizes itself, it thus follows necessarily that that which is caused among them conceptualizes its cause.

From this it becomes evident that some of these are principles for others *qua* formal as well as *qua* efficient and final [cause] (according
j154 to what has been shown regarding how these are related to the forms of the rotating celestial[a] bodies [619]), for both [causal] relations are one and the same. This is also the reason why[b] that which is their cause is not for the sake of that which is caused, because that which is nobler cannot be for the sake of that which is less noble. Rather their being caused by [that] cause is only something consequential to the perfection
m390v of [this] cause, as ignition is consequential to the substance of fire [620].

If all this is as described, it is clear that the cause among them cannot conceptualize that which is caused by it. Otherwise, it would be possible that the cause became caused and that the nobler reached its entelechy through the less noble, which is absurd. Hence, it is absolutely evident that—supposing these [principles] have a first and, according to what has become clear above, uncaused principle—this [first principle] conceptualizes only itself and [that] it does not conceptualize that which is caused by it. This latter is not peculiar to the first among these principles, but rather common to all, including the celestial bodies. Indeed, we do not believe that they conceptualize the things below them in the way they exist [in the sublunar world]. For in that case the nobler would reach its entelechy through the meaner, and their conceptualizations would be subject to coming-to-be and corruption, as is the case with human intelligibles.

If things are this way, each of these separate principles, despite being one in the sense that subject and object of its thinking is one and the same, differs from the others in rank in this [respect]. That which
q148 deserves most the [predicate of] oneness among them is the first simple [principle], then that which follows this, then that which follows that. Generally speaking, the more principles [a principle] needs in order to conceptualize itself, the less simple it is and the more multiplicity there is in it, and, conversely, the fewer principles it needs in order to conceptualize itself, the more simple it is, such that strictly speaking only the first simple is a [principle] which is not in need of anything outside itself in order to conceptualize itself [621].

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a *Al-samāwiyya* according to ms. *H* and I. Mantino, omitted in the remaining mss.

b Reading, with ms. *H*, *wa-li-dhālika aydan* instead of *wa-ka-dhālika aydan* ('And similarly also') of the remaining mss.

This is the outcome of the study of the conceptualization of these a144
principles. It is, however, beset with a number of unpleasant conse- j155
quences and doubts, one of which is that these principles have no knowledge of the things they are the principles of, so that these [things] must emerge from them in the way natural things emerge from one another, as ignition emerges from fire and cold from snow. Their emergence thus would not be manifested by knowledge. But it is impossible that something emerges from the knower *qua* knower without being known to him. This is indicated by [God's] word: "Should He not know what He created? And He is the Subtle, the Aware" [622]. Moreover, not-knowing is a deficiency, but that which is most superior cannot have any deficiency.

This is the most powerful doubt connected to the above position, but we will remove it. We say: Since an agent gives to [its] effect only something similar to what [is] in its own substance, while the effect is necessarily different and numerically distinct[a] [from the agent], one of the [following] two things must apply. Either the difference is established through matter—this must be the case when the effect [pertains] to the [same] species as the agent without there being a [relation of] superiority [and inferiority] regarding the form between them—, or the difference between them [lies] in such a [relation of] superiority [and inferiority] in the same species, namely in that the agent [pertaining] to q149
this species is nobler than the effect (for the effect cannot be essentially nobler than the agent because it is exactly through the agent that its quiddity is established). In light of this, the difference between agent and effect, and cause and being caused, in these immaterial principles can only be [a difference] in superiority [and inferiority] with respect to nobility in one and the same species, but not a distinctness in species.

Since the human intellect in actuality is nothing else than the conceptualization of the order and system present in this world and in each of its parts and the knowledge of all that is in this [world] through its remote and proximate causes up to a complete [knowledge of] the world, it follows necessarily that the quiddity of the intellect which j156
brings about this human intellect is not distinct from the conceptuali- a145
zation of these things. For that reason one says that the active intellect

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a Lit. 'second in number'.

m391r thinks the things[a] of the present world. However, its thinking of these things must take place in a nobler way [than ours], for otherwise there would be no difference between us and this [intellect], and how could that be? As has already become clear, our intellect in actuality is subject to coming-to-be and corruption due to its connection to matter, whereas its intelligible [object] is eternal [and] immaterial. Due to its insufficiency the human intellect depends in its thinking on the senses. This is why, if we are deprived of one of the senses, we have no intellection of its [objects]. Similarly, if the perception of a certain thing is difficult for us, we fail to grasp its intelligible and cannot establish it other than by general assumptions. Accordingly, there might be things in the present world whose causes are unknowable to us, but present in the essence of the agent intellect (this may be a viable account of the causes of dreams and other such forebodings). In any case this insufficiency of our [intellect] is a consequence of matter.

q150 As in this [relation between the human intellect and the agent intellect], so it applies also to the intelligible [object] of the intellect which brings about the agent intellect that it is nothing else than the intelligible [object] of the agent intellect, since it is of the same species as this, except that it is [the object of thought] in a nobler way. And this goes on up to the first principle which thinks being in the noblest of all the ways immaterial intellects can be superior to one another. For necessarily[b] its intelligible [object] does not differ in species from the human intelligibles, and all the more [does it not differ in species] from the remaining intelligibles of the other separate [intellects][c]. However, it is very much distinct from the human intellect in terms of nobility. What is next to its substance is the intellect which follows it, and so on in a graduated manner until the human intellect [is reached].

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a The Arabic text corresponding to 'For that reason ... things' is omitted by homoioteleuton in ms. *H* and not taken into consideration in the translations by Horten and Van den Bergh.

b 'Necessarily *(ḍarūratan)* is omitted in some manuscripts. I. Mantino (fol. 391ra) reads 'forma' *(ṣūra)*, but adds 'forma' also before the following 'human intelligibles'.

c Reading, with mss. *G, H, P, Q, T*, and I. Mantino, *sāʾiri maʿqūlāti sāʾiri l-mufāraqāt*. The first *sāʾir* ('remaining') is omitted in mss. *D, M*, and T^{marg} and secluded by Quirós and Amīn.

As the most specific subject of human conceptualization consists of material things only, while it is only by analogy that we think these principles (although our thinking of them takes place only according to a [certain] graduation, for what is closest to our substance is the agent intellect, which is why some deemed it possible to conceptualize its essence properly, such that man is himself this [agent intellect] and what is caused becomes identical with the cause [623]), so the subject of j157
the agent intellect's conceptualization too consists of its essence only, a146
while it is only by analogy that it thinks the principle of this. The same applies to the third and the fourth [intellects] and so on, until the first principle is reached. Therefore, it is proper to the first principle not to think anything by analogy. Hence, it does not think any intelligible which is [somehow] deficient, but rather its thinking is the noblest one because its essence is the noblest one. For that reason there is no superiority in nobility in its essence; rather, it is the noble as such without any relativity. If what the caused ones among these principles think about their cause were the same as that which the cause thinks about itself, there would be no difference between cause and being q151
caused, and these separate things could have no multiplicity at all [624].

From this discussion it has become evident how these [principles] may be said to think all things (for in this respect the matter is the same for all of them, including the intellects of the celestial bodies), as well as how they are said not to think that which is below them. Thus, the afore-mentioned doubts can be removed. For in this way one may say that these [principles] know what emerges from them because that which emerges from a knower *qua* knower must be an object of knowledge, as said [before]. Otherwise its emergence would take place in the way natural things emerge from one another. The former doctrine is adhered to by those who teach that God knows the things, the latter is adhered to by those who teach that He does not know what is below Him. [They hold this opinion] because they are not aware of the equivocality of the term 'knowledge' and take it as denoting a single m391v
meaning. As a consequence of this [misconception] they [set forth] two contrary statements, as happens with statements taken indefinitely [625]. Likewise, the [other] afore-mentioned problem [626] can be solved by this [consideration], for deficiency consists neither in knowing something completely nor in not-knowing something in a deficient way. Rather, deficiency is something else. For if somebody fails to see a

j158 a147 thing inaccurately, although it can be seen in a complete way, this is not truly a [case of] deficiency.

The described [view] is what becomes evident from the doctrine [maintained] by Aristotle and his adherents or follows from their doctrine, for they explain explicitly that the agent intellect knows what is in this world, that is what is below itself, and similarly [that this holds q152 good] for the intellects of the celestial bodies [627]. As has become clear from our discussion, it makes no difference whether we admit this for the agent intellect or for the principles above the [agent intellect], because these [principles] cannot think that which does not constitute their substance, except in the way explained [above] [628].

From what has been said it is thus clear how these principles think themselves and that which is outside themselves. That these principles are substances is beyond doubt, as the principles of substance must be substances. And further, if the term 'substance' applies to these immaterial [principles], it will apply most appropriately to the first principle because its substance is the cause of their substances [629]. Likewise, it is evident that these principles are alive, full of pleasure and delighted in themselves [630], as well as that the first among them is the life [above which] there is no more perfect life and the pleasure [above which] there is no greater pleasure because it is delighted in itself only, whereas the delight and joy of anything else is only through it. For if we apply the term 'life' for ourselves to the lowest level of apprehension, namely sensory apprehension, how much more will this term apply to the objects of apprehension of the best apprehender through the best apprehension? And the same applies also to pleasure because it is an inseparable companion of apprehension, with different grades of superiority depending on the objects of apprehension themselves, as well as on the duration of their apprehension [631]. Thus, how much more will these principles truly enjoy their apprehension? For each of a148 them, except the first [one], enjoys itself and the first and takes delight in itself and in the first, while the first enjoys only its own essence and is delighted in it. Since its apprehension is the noblest apprehension, its pleasure is the greatest pleasure; and although it shares with the other q153 j159 [principles] being eternally full of pleasure, the latter [derive] the [eternal] duration of [their] pleasure only from it and [from the fact that] it enjoys its own essence. And similarly their remaining common properties too are found in the [first] through its essence and in themselves through it.

Since it has become clear in an earlier part of our discourse that one has to search in [each kind of] substances for a single first [substance] which is the cause of that there are many of them (for, as has become plain there, there must exist a single [first thing] in each multiplicity), there must be also in these [separate] substances a single first [substance] which is the cause of their being many and numerically different [632]. This is one [reason] it is evident that among these principles there must be one which is prior by nature to the [remaining] ones, inasmuch as they are many [and] superior to one another within the [same] species. Furthermore, since the one in each genus is that which is neither divisible nor [becomes] many through the divisibility found in that genus, and [since] the multiplicity found in each of these separate [principles] inheres them only in so far as they think, in accordance with their essence, a multiplicity [633], as has become plain in the preceding section, it follows necessarily that the one in this [genus] is indivisible with respect to what it thinks in accordance with its essence. m 392r
Hence, [the latter] thinks only one simple thing, namely its essence, and is unable to think any multiplicity, no matter whether in its essence or outside its essence. It is one and simple in its substance, while anything else becomes one through it.

Since the meaning of 'oneness' [applied] to each of these separate [principles] consists exactly in [the fact] that their object of thought is one, and this in so far as the multiplicity of intelligibles by which each of them is constituted amounts to a single intelligible, it follows necessarily that the meaning of 'oneness' applies truly and primarily only a 149
to the first [principle], and [only] secondarily to what follows it, then to what follows that in the order [of principles][a], until [finally] the largest q 154
multiplicity of intelligibles of [all] intellects is that found in this human intellect [634]. This now is the one we were constantly searching for in the preceding discourse, and it is the one in substance from which all other substances derive their unity.

Having clarified the special properties of the first [principle] and of each existent of these separate [principles], we must now consider how j 160
the latter are ordered from the first principle up to the lowest level of

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a Reading, with mss. *A, M, P*, and *Q*, *thumma li-mā yalīhi thumma li-mā yalīhi fī-l-rutba*. The first *thumma li-mā yalīhi* ('and [only] secondarily to what follows it') is omitted in the remaining mss. and secluded by Quirós and Amīn.

sensible being, that is the simple elements and prime matter [635]. We say: It has become plain from the preceding discussion that the mover of the sphere of [fixed] stars is the noblest among these moving causes and that it is their first cause. Thus far this discourse was definite. However, when we compare those [afore-mentioned] peculiar properties of the first [principle] (I mean that it is one [and] simple and does not think any multiplicity in accordance with its essence) with the activity of this mover, [we find that] these properties do not suit it because necessarily there must have emerged from this mover more than one form. For this [mover] is what provides [both] the form of the sphere of [fixed] stars as well as the existence of the mover of the sphere which follows this in the order [of the spheres], whereas that which is consequential to the simple one in so far it is one and simple is certainly one. How then could a multiplicity of different grades of nobility be consequential to it (for no doubt the mover is nobler than the form of the sphere)? Hence, the essence to which these two existents are consequential must have parts, one of which is nobler than the other. But if this is the disposition of this essence, I mean the mover of the sphere of [fixed] stars, this [essence] is necessarily caused, having a cause which is the origin of its existence. And this principle will be that
a150 q155 which is fitted and suited by the afore-mentioned properties, and this is God (praised and exalted), for the introduction of another principle prior to this is inevitably superfluous, but nothing in nature is superfluous.

As for [the question] how these principles are ordered [starting] from this first [principle], it is evident that the closer they are to it, the simpler and nobler [their] intelligibles must be. Since there appears to be no nobler mover than the mover of the universe, this [mover] must
j161 be the first thing emerging from the [first principle]. However, the order of the [principles] following this one is a matter of dispute because, as said [above], we have to assume that the nobler is prior to the less noble. Now, what it is to be nobler in this [case can] become evident only by one of the [following] four things: either the velocity of motion, or the size of the moving body and the fact that it surrounds [the next smaller sphere], or the size of the stars, or their number[a]. A

a Reading, with the majority of the manuscripts, *aw kathratuhā*. Ms. *M* has *wa-kathratuhā* ('and their number'), adopted by Quirós and Amīn, ms. *H* reads *aw kuratuhā* ('or their orbit').

fifth [criterion][a] is [given by] the greatest and smallest numbers of motions by which the motion of the stars are completed. For whenever more than one mover is needed in order to set the stars in motion, this necessarily [implies] a certain deficiency[b] in comparison with that which needs fewer motions or that which needs no other motion at all[c] [636]. That nobility pertains to the mover of the sphere of [fixed] stars in each of these respects is clear. To be more precise, its motion is the quickest, its body is the greatest, and it moves a large number of stars with one m392v motion, as opposed to how things are with the remaining stars. But as regards the order of the [movers] following this one, it seems, as said [above], that there are no incontestable premises at hand, but only the method of [choosing] what is most appropriate and convenient.

According to this [approach], we might assume in compliance with the custom of the commentators that the mover following this one in a151 the order [of movers] is the mover of the sphere of Saturn, and so on in the order of the spheres as explained in the discipline of mathematical [astronomy]. We said that there is no incontestable method at hand for q156 this [problem] because if we determine the nobility of these moving [causes] as a function of how their spheres are situated to one another, these criteria which define nobility get into conflict with one another. For the surrounding is nobler than what it surrounds because it is like form for it, but in the [surrounding sphere] we do not find the nobility

a Reading, with mss. *A, D, G, H, M, P* and *T*, *wa-l-khāmisu*, which has been changed, due to Ibn Rushd's announcement of four criteria, by a conceited scribe into *wa-l-rābiʿu* ('and the fourth [criterion]'). This latter reading has been adopted in ms. *Q* (where it is corrected interlinearly into *wa-l-khāmisu*) as well as in the *Vorlage* of I. Mantino ('Quarta', fol. 392rb), and it is noted in the margins of mss. *G* and *T*. Likewise, the editions by Quirós and Amīn read *wa-l-rābiʿu*. The reason why the following criterion is set apart from the four preceding ones is that, as explicitly stated, only the afore-mentioned four criteria lead to clear-cut results with respect to the graduation in nobility, whereas the applicability of this fifth criterion depends on the contradictory doctrines of the astronomers; cf. also note 604.

b Reading *naqṣun min jihatin* instead of *naqṣun fī ḥaqqihī* ('a deficiency in its truth' [true nature?]) in all Arabic manuscripts. I have not been able to find any reference for the expression *fī ḥaqqihī* in another work by Ibn Rushd. The reading *naqṣun min jihatin* is confirmed by Mantino's translation "quaedam imperfectio," fol. 392rb.

c 'Or that which ... at all' is omitted in the translations by I. Mantino and Van den Bergh.

determined by the velocity of motion, the greatest and smallest numbers [of motions], or by the greatest or smallest size of the stars. For obviously the lower the sphere, the faster is [its] motion, as [is evident from] the spheres of the sun and the moon (admittedly, somebody
j162 might argue that this velocity is [to be seen], not absolutely, but in relation to the dimension [of their orbits]). Likewise, it is also evident in the case of the sun that it is the greatest star and that it has the smallest number of motions. Hence, one cannot establish the order of the [movers] in a decisive way on the basis of these criteria, as we said.

[Furthermore,] one might ask [the commentators] the following question: If we posit, in accordance with your order [of the movers], that from the mover of Saturn, for instance, the soul of its sphere as well as the mover of the following sphere emerge, and [that] the motion of the sphere of [Saturn] is a composite of more than one motion, then there must emerge from this [mover] more than [just] one mover. Evidently their number must be as much as six, namely the one mover of the sphere which follows the [sphere of Saturn] and five [movers] which impart together the motion of Saturn. However, according to your assumption there should not emerge more than three things from this mover because it holds the third rank with respect to the first [mover] and the multiplicity inhering the activity of [a mover] necessarily adheres to the [grade of] becoming multiple in its own essence, just as there is only one activity adherent to the uniform essence.

We reply: This [argument] would be conclusive only if we posited that these things emerge from this third mover in such a way that they would occupy the same level with respect to it[a] in the [process of] emerging from it. But we say that on a first [level of] emergence only three things emerge from this mover which holds the third rank [among
q157 the celestial movers] and moves the sphere of Saturn. [These are] first the mover of the following sphere, secondly the soul of the star, and
a152 thirdly one of the movers which move the star by their [own] motion. [Only] then the remaining three moving [causes] of Saturn emerge from this [latter] mover, [and this] again in an ordered way, namely the second from the first and the third from the second.

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a Reading, with the majority of the manuscripts (including I. Mantino), *fī martabatin wāḥidatin minhu*. *Minhu* ('with respect to it') is omitted in mss. *H* and *M* as well as in the three previous modern translations.

But if somebody objects that this [doctrine] entails that the movers of the moon and the sun, for instance, being those two principles which have the greatest multiplicity in their essence, should be [of such a kind] that the movers emerging from them are in accordance with the multiplicity inhering their essences, so that the moon, for example, should have nine motions and the sun five (in case we locate it on the fourth sphere) or eight (in case we locate it, contrary to what the mathematicians have shown on this [issue], on [the sphere] above the moon and below Venus and Mercury) [637], we shall reply [as follows]. If [it is argued] that the multiplicity emerging from each of the [movers] cannot be greater than that into which [their] essence is divisible, this is correct. For that reason there emerges one [mover] from the one [first mover], while it is impossible that two [movers] emerge from it. [Likewise,] there cannot emerge three [things] from that whose essence is divisible into two [parts], nor four [things] from that whose essence is divisible into three [parts]. But if [it is argued] that that which emerges from a multiple essence in any case must be numerically identical with [the parts] into which the essence is divisible, this is not so clear. For as we have shown above, none of these principles can be without activity [638]. And possibly this does not entail that the activities of each of these [movers] are necessarily numerically identical with [the parts] into which their essence is divisible. Rather, this might depend on their superiority [or inferiority] in nobility, so that the nobler among these [movers] with divisible essences have [a number of] activities corresponding with their essence, while the multiplicity of activities of the less noble [movers] is deficient in comparison with the multiplicity of their essence. This [assumption] does not entail the absurd [consequences] following from [the assumptions that] a multiplicity of activities emerges from the uniform essence or that the multiplicity emerging from a multiple essence is more perfect than the multiplicity inhering the essence of the cause.

j163 m393r q158 a153

This is how one has to maintain [the doctrine of] the order of these substances with respect to their emergence from one another. Otherwise, it entails the preposterous [consequence] that has to be avoided, namely that the one emerges only from that which is one[a]. This mis-

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a Reading *al-wāḥidu laysa yaṣduru illā ʿan wāḥidin*. Mss. *H, M*, and I. Mantino omit *illā* and read *ʿanhu* instead of *ʿan*. According to this version the

conception [was inferred] by way of inversion. To be more precise, in view of the truth of [the principle] that from the one only one can emerge [639] it was erroneously surmised that this proposition is invertible and that [consequently] one activity can emerge only from that which is one, and duality can emerge only from that which is dual. However, the truth is that from the one only one can emerge, and [that] from the dual only the dual and what is below [duality] can emerge. But this does not entail that any duality necessarily emerges from that which is dual [640].

The above is the doctrine of recent Islamic philosophers like Abū Naṣr [al-Fārābī] and others. The doctrine is also ascribed to Themistius and Plato among the ancient philosophers [641]. The [argument] I men-
j164 tioned is the strongest of the proofs they [adduce in] support of this doctrine, but it is faulty. For the statement that from the one only one can emerge is a true proposition about the agent only in so far it is agent, but not in so far it is form and end. [This is so] because form and end are said to produce an effect only by some sort of similarity. The crucial question in this [context] is whether it is possible to form more
q159 than one concept[a] of one simple thing, so that by this [conceptualization] the entelechy of more than one thing is caused. If this is impossible, the problem is correctly [solved through their doctrine], but if it is possible, [their approach to] the problem is false. We have discussed this [issue] elsewhere[b] [642].

sentence means 'that that which is one does not emerge from the one', which makes no sense firstly because it is certainly not a preposterous doctrine for Ibn Rushd, and secondly because it is not the inversion of the principle that from the one only one can proceed, referred to in the following sentence. Nevertheless, this reading has been adopted without any remark by Quirós and Amīn. The remaining manuscripts read *al-wāḥidu laysa yaṣduru ʿanhu illā wāḥidun* [or: *wāḥidan*], thus quoting exactly this principle. This reading, adopted by Jihāmī, likewise makes no sense, as Ibn Rushd refers to the content of the present sentence as the inversion *(ʿaks)* of this very principle. In all likelihood, the reason for this confusion lies in the omission of *illā* in an early manuscript, transmitted in mss. *H, M*, and in the Hebrew tradition, and in the misplaced insertion of a marginal correction of this omission in a manuscript from which the remaining Arabic manuscripts ultimately descend. Cf. also note 640.

a Instead of *yataṣawwara* ('to form a concept'), ms. G^{marg} and the origin of I. Mantino's translation ('ordinetur', fol. 393rb) read *yaṣdura* ('to emerge/proceed').

b The present paragraph ('The above ... elsewhere') is omitted in ms. *H*,

So, let us assume the following order [of movers]:

[(i)] From the first principle the mover of the sphere of the [fixed] stars emerges.

[(ii)] From the mover of the sphere of the [fixed] stars the form of the sphere of the [fixed] stars and the mover of the sphere of Saturn emerge.

[(iii)] From the mover of the sphere of Saturn[a] there emerge the soul of the star, the mover of the sphere of Jupiter[b], and exactly one of the movers which together impart the motion of Saturn.

[(iv)] From this [latter] mover there emerge the remaining three moving [causes][c] of the motions of this star ([and this] likewise in an ordered manner).

[(v)] Then, from the mover of the sphere of Jupiter, there emerge again three [things], the mover of the sphere of Mars, the soul of the sphere of [Jupiter], and a third mover. a154

[(vi)] From this [third mover] the remaining movers which impart together the motions of [Jupiter] emerge in an ordered manner, [i.e.] the second from the first, the third from the second, and the fourth from the third.

[(vii)] And this [scheme] seems to hold good for all [remaining] movers.

[However,] this order is not incontestable, but rather in accordance with what is most appropriate and fits best. One might also maintain that the mover of the sun emerges from the mover of the sphere of the [fixed] stars, then from the mover of the sun the mover of the sphere of Saturn emerges, and so on in an ordered manner up to the mover of the moon. What points to such an order is, as stated [above], the observable course of the stars in comparison with the sun and their holding of fixed distances from the [sun] during their [motions of] acceleration and deceleration [643]. [This applies] especially to Venus and Mercury j165 m393v

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secluded by Amīn (cf. p. 153, note 8), and not taken into consideration in the translations by Horten and Van den Bergh.

a *Wa-muḥarriku falaki zuḥal* in all mss. (including I. Mantino), secluded by Amīn and Jihāmī.

b After 'Jupiter', ms. *P* (end of fol. 233v) breaks off.

c Reading, with ms. *M*, *al-muḥarrikāt* instead of *al-mutaḥarrikāt* ('things set in motion', 'movable things') in the remaining manuscripts (including I. Mantino); for the six movers of Saturn and its sphere cf. above, p. 166.

because the motions of the two spheres carrying these [planets] are [always] in accordance with the motion of the sun. Furthermore, the course of the moon appears to form a straight [line with the sun][a] when [the moon is] in conjunction, opposition or at quartile aspect [644]. And,
q160 upon my life, perhaps this is also the case with the three supra-[solar planets]. Therefore, it is not far-fetched, as we said, that the sun is the noblest [moving star] and that its mover follows in the order [of the celestial movers] the mover of the sphere of the fixed stars. As already mentioned, there are, in short, no premises at hand by means of which we can establish the order of the [movers] in an incontestable way.

As for the agent intellect, this emerges from the last [mover] in the order of these moving [causes], which should be determined as the mover of the sphere of the moon. [Finally,] the elements are necessarily caused through the greatest motion. This has already been shown in *De caelo*, for it was stated there that it is the nature of motion to cause heat, and [that] lightness, which is the form of fire, is consequential to the existence of heat, while its opposite, namely gravity, is consequential to privation of motion [645]. For that reason, fire borders the concave interior of the rotating [celestial] body, while the earth, being [most] remote from the motion of the encompassing [bodies], stands firm in the centre, and the simple [elements] which are between fire and
a155 earth, i.e. water and air, display both dispositions, being heavy and light, [i.e.] heavy in relation to what is above them and light in relation to what is below them.

On the whole, since the existence of [these] simple bodies is due to their contrariety [646], while that which brings about their contrariety is nothing other than the motion of the rotating body, the rotating [celestial] body must be that which brings about and preserves these [elements]. And it is not only these two relations to them that is found in the [celestial body], but this functions also as form for them to which they are related as matter. For the lower among them is brought into
j166 entelechy through the higher, so that finally each of them is brought into entelechy through [this] rotating body. This has become plain in *De caelo*.

Furthermore, inasmuch as [this] ball-shaped body is rotating, there
q161 must be a body round which it revolves and which is the centre [of its

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a Lit. ‘appears to be a straight course’; cf. note 644.

revolution]. The earth displays this property regarding the celestial body. And if there is the earth, there are the remaining elements. Hence, the existence of the celestial body entails necessarily the existence of the elements, just as the form of the house necessarily entails [the existence of] adobe and baked bricks. This being the case, the celestial body causes the existence of the elements as preserving, efficient, formal, and final [cause].

As for homeomeric [bodies], it has already become clear in the natural sciences that all that is required in order to state their proximate causes are the elements and the motions of the celestial bodies [647][a].

a156 q162 But the doctrine [unfolded] in this science forces us to introduce an extrinsic principle for the existence of plants and animals. For evidently these have potencies for certain activities performed in respect to a certain end, such as the nutritive soul. Con-

According to Aristotle, in a similar way also some compounded bodies become ensouled due to the celestial bodies. This is why Aristotle says that a man is generated by a man and the sun [648]. In his [view], the reason for this is that an individual is

a The following section (printed in columns) is transmitted in three versions. Version *A* comprises only the text printed in the left column and is represented by ms. *H*. It ends with the words 'if this is as explained' which mark the transition to the following section. Version *B* comprises only the text printed in the right column and is represented by all other Arabic manuscripts except ms. *M*. It ends with the same phrase as version *A*. In a third version *C*, transmitted in ms. *M*, the Hebrew tradition, and I. Mantino's translation, we read first the text of *B*, then that of version *A*. Since the transition at the end of both version fits neither the beginning of *A* nor that of *B*, but does fit the beginning of the section following these versions, we are quite safe in assuming that the text intended for circulation was not a combination of the versions *A* and *B*. This rules out *C* as well as the reverse sequence *A*-*B*. This assumption is corroborated by doctrinal contradictions between versions *A* and *B*. All this suggests that we are faced with two different redactions, in all probability by Ibn Rushd himself, of the present section, one of which was composed in order to replace the other (cf. note 654). The Arabic text of version *A* is printed in Quirós, p. 161, l. 24 (*wa-innamā*, not *fa-innamā* as printed there) – p. 163, l. 6 *(waṣafnā)*; Amīn, p. 156, l. 1 – p. 157, l. 1. The Arabic text of version *B* is printed in Quirós, p. 161, l. 10–24; Amīn, p. 155 sq., note 14; Jihāmī, p. 166, l. 11–22.

sequently, these [activities] cannot be attributed to the elements. Nor is it possible to attribute their existence to the generating individual because the generating individuals supply only either the receptive matter or the [bodily] organs for such things, e.g. semen and menstrual blood. All this has been shown in the natural sciences.

However, when the issue is considered in this science [of metaphysics], it becomes evident that that through which these things become intelligible cannot originate from an individual material form in so far it is individual. For if it is the nature of the material form[a] to produce forms in matter *qua* material [forms], it is impossible that this [nature] is found in separate forms. On the other hand, it has become clear that separate forms do produce forms in matter. Hence these brought into existence only by [another] individual of the same kind. Since these [celestial bodies] are bodies which have life, life is passed by them to that which is in the present world. For it is impossible that matter moves [a thing] to an animated entelechy, unless it is a body naturally disposed to being ensouled. [This is so] because one thing passes to something else only that which is [part] of its [own] substance. Aristotle introduces the separate intellectual principle in the natural sciences only for the human intellect and for the motions of the celestial bodies. As for the human intellect, [he does so] because in the material intellect there is a potency which is unmixed [with matter][b] [648], while there is no matter which would require [for its actualization] to be changed by a body. As for the m394ra

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a Reading, with ms. *H* and I. Mantino ("formae materialis," fol. 394ra), *al-ṣūrati l-hayūlāniyya* instead of *al-ṣuwari l-hayūlāniyya* ('material forms') in ms. *M*, adopted by Quirós and Amīn.

b Reading, with ms. *Q*, *min qibali anna l-ʿaqla l-hayūlāniyya fīhi imkānun ghayru mukhālatin*. Ms. *M* reads *min qibali anna l-ʿaqla l-hayūlāniyya lammā kāna ghayra mukhālatin* ('because the material intellect, since it is unmixed [with matter]') which is syntactically unsound. Mss. *D, G*, and *T* read *min qibali anna l-ʿaqla l-hayūlāniyya bi-makāni ghayri mukhālatin* ('because the material intellect holds the position of an unmixed [thing]'). Ms. *A* has a combination of both readings *(bi-makān fīhi imkān)* which makes no sense, while I. Mantino omits any of the variant readings. Cf. note 652.

[forms] are necessarily not produced by material forms[a]. This must be so also for the reason that the individual material thing produces only [another] individual thing of its kind, whereas it is evident that the intelligible form which produces [something] is not an individual thing. For that reason, the active intellect must provide [both] the forms of simple bodies as well as [those] of other things. That which essentially generates an individual [entity] is an individual of the same kind. This is why Aristotle says that a man is generated by a man and the sun [649], and that it is the individual which generates essentially, whereas form generates accidentally [650]. Consequently, it becomes clear here [in metaphysics] that that which generates these [separate material forms] is something different from the individual. Hence, the concrete man which is brought into existence essentially is generated by the concrete sun and the celestial bodies, [he does so] because their potencies are infinite [651].

m394rb

q163

a Thus ms. *M (fa-wājibun allā yakūna yuḥdithuhā l-ṣuwaru l-hayūlāniyya)*. Ms. *H* reads *fa-wājibun allā yakūna muḥdathuhā l-ṣuwara l-hayūlāniyya* ('hence the [forms] they [i.e. the separate forms] produce are necessarily not material forms'). Be that as it may, it is clear that Ibn Rushd distinguishes between separate forms producing separable 'forms in matter' *(ṣuwar fī l-mawādd)* and individual material forms producing inseparable 'material forms' *(ṣuwar hayūlāniyya)*.

concrete man only, whereas that which is brought into existence in it accidentally, namely humanity, is generated by the [form of] humanity which is separated from matter [652].

This marks the difference between the doctrines of Aristotle and Plato regarding the efficacy of forms [653]. Bear it in mind[a], for in this way other absurdities can be removed!

a157 If this is as explained [654], and it is clear that the celestial bodies are the cause of the existence of the elements and in how many ways they are their cause, the forms of j167 the elements [must] be the proximate cause of the existence of prime matter, which is common to them, but this only *qua* form and end. For apart from these two it is impossible to conceive any other cause of prime matter, because the efficient [cause] effects a thing by passing to it its substance through which it is what it is, that is its form. But prime matter has no form, such that there would [have to] be an efficient [cause] for it. Likewise, it is impossible to conceive another matter [as cause] for it, since it is the first [matter] [655]. It is, nevertheless, possible to conceive matter as being caused in another way. For 'matter' is predicated of this [prime matter] as well as of the matters of the m394v celestial bodies *secundum prius et posterius*, and in things of this kind that which is prior is the cause of existence of that which is posterior. Hence, the matter of the celestial bodies is also according to this [conception] the cause of the existence of this matter, whereas the cause of the existence of the matters of the celestial bodies is nothing but their forms.

If this is as explained [654],

That these [things] are ordered in this way by necessity becomes comprehensible as follows. Due to the perfect existence of these separate [principles] there must emerge other beings from them. The

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a Reading, with I. Mantino ("et retine ipsum," fol. 394rb), *fa-qif ʿalayhi* instead of *yaqifu ʿalayhi* in ms. *H* which makes no sense. Ms. *M* omits the phrase.

forms of some of these beings can exist only together with a substrate. q164
Hence, this substrate necessarily must exist, and the existence of these forms in the material [things] is by necessity [656]. As for their existence as such, I mean the souls of the rotating [celestial] bodies, this is for the sake of the best, for their existence is necessarily better than their non-existence.

In this [way] potential doubts about the existence of these forms in the present world can be removed. For somebody might object: If [the forms] exist in that which is separate in the best [possible] disposition, then why do they exist subsequently in an inferior disposition (unless one argues that the providence [implied] in this is only for [the sake of] a158
matter, but then the nobler would be for the sake of the inferior)? [To this] we reply: Their existence in this [inferior] mode is necessarily a second existence which—*qua* existence—is better than non-existence [657]. For that reason they have a deficient existence, but their deficient existence is for the sake of the best in comparison with their non-existence. That they have a deficient existence and [that they] are forms j168
in material [things] happens by necessity, since they cannot exist in a more perfect mode. Just as it is the best for us, once we have attained the utmost perfection, to communicate this [perfection] to others as much as possible, so it is with the separate principles when the souls of the celestial bodies emerge from them.

[Likewise,] the forms of the four bodies, I mean the elements, exist only due to necessity, namely due to the existence of the forms of the rotating [celestial] bodies. Furthermore, it is due to necessity that they exist in matter, as if two kinds of necessity came together in them, one with respect to their existence, the other with respect to their being in q165
matter. The reason for both necessities in them is the existence of the rotating [celestial] bodies. For the latters' existence [as such] necessitates their existence [as such], while the latters' existence in a substrate [necessitates] the [elements'] being in matter.

As for forms realized after the blending and composition of the elements such as the forms of plants, animals and man, their existence as such is only for the sake of the rational soul, while the existence of the rational soul is for the sake of the best [disposition], as is the case with the celestial bodies. For that reason we hold that man is that which comes closest in rank to the celestial bodies in this world, and [that] he a159
is a sort of intermediate between eternal beings and that which is subject to coming-to-be and corruption. [Thus] the existence of the rational

soul in matter is likewise due to necessity. Furthermore, the rational soul is related in the present world to the forms inferior to it as the rational [forms] are related to the acquired intellect [658]; and the sensitive [soul] is related to the rational [soul] like matter [to form]. The same applies to the relation between nutritive and sensitive [souls]; and homeomeric [bodies] are likewise related to the nutritive [soul] like matter to form. [Finally,] this very [relation] is how the forms of ho-
m395r meomeric [bodies] are related to the elements of the human [body]. Man is thus the link which connects sensible being and intelligible being, which is why God perfected through this [intelligible being][a] that [former] being which is afflicted with deficiency due to its remoteness from [God].

j169 As for [the question] why there are more than one kind of plant and animal souls, most of these seem to exist for the sake of the best. In some [cases] it seems to be clear that they exist only for the sake of
q166 man or for the sake of one another, in other [cases], e.g. animals hostile to man or poisonous plants, this is not clear. As will become plain later, the reason for this is that [the capability of] these beings to destroy each other is for the greatest part only a kind of accident and due to the necessity of matter, as [in the case of] scorpions and other predatory animals by which is evidently destroyed what is, if not nobler than these, at least not inferior, yet this is only due to necessity.

From this discussion it has become plain how the existence of some things [comes about] necessarily from others, [how] things are related
a160 to one another regarding [their] entelechy, that the entelechy of each of them is related to the entelechy of the first[b], and that their existence is necessarily caused by the existence of the first. In what follows we have to consider the question of [divine] providence for the present world, that is for that which is below the sphere of the moon. We will approach this [question] by presupposing the above [results] [659].

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a Reading, with the majority of the manuscripts (including I. Mantino), *bihī* instead of *lahū* ('for him', i.e. for man) as transmitted in mss. *H* and *M*, adopted by Quirós and in the three previous modern translations.

b Reading, with the majority of the manuscripts, *ilā kamāl al-awwal*. Ms. *A* and I. Mantino ("primam perfectionem," fol. 395ra) read *ilā l-kamāl al-awwal* ('to the first entelechy'), ms. *Q* originally had the same variant reading, but the article *al-* in *al-kamāl* is deleted.

We say: The existence of these things which are on the earth and the continuous preservation of their species are necessarily intended [and] cannot be produced by chance, as many of the ancients thought [660]. This becomes evident if one investigates how the motions of the celestial bodies accord with the existence and preservation of each thing generated in the present world. This is most obvious in [the case of] the sun, then [also] in [the case of] the moon. For in the case of the sun it is clear that if its body were greater than it is [actually] or closer in space, the species of plants and animals would perish of excessive heat. Similarly, they would perish of excessive cold, in case its body were smaller or more remote. This is confirmed by [the fact] that that whereby the sun produces heat is [both] its motions as well as the reflection of its rays [661], and by the places uninhabitable due to excessive cold or heat [662]. Likewise, [divine] providence becomes also clearly evi- q167
dent from the inclination of the sphere of the [sun]. For of its sphere j170
were not inclined, there would be no summer, winter, spring, and fall here [on earth]; and clearly these seasons are necessary for the existence of the species of plants and animals [663]. [Moreover,] providence is readily apparent in the diurnal motion, for without diurnal motion there would be no day and night, but rather day [lasting] for half a year and night [lasting] for the other half, during which things would perish, either by day due to heat or by night due to cold [664].

As for the moon, its effect on the coming-to-be of rain and the a161
ripening of fruits is clear, too [665]. Furthermore, it is clear that [the moon] would not have this effect, if it were greater or smaller as it [actually] is, or [if it were] more remote or closer, or [if it] would not receive its light from the sun. In addition, if its sphere were not inclined, it could not have different effects at different times, which is m395v
why it warms the nights during the cold season and cools [them] during the hot season [666]. As for its warming effect during the cold season, this is due to [the fact] that at that time its position in relation to us is comparable to the position of the sun during the hot season in that it is closest to the observer's zenith because its orbit [reaches] the greatest inclination [667]. But in the hot season the situation is the other way round [668]. In other words, [both] the [moon's full] visibility as well as its invisibility [can] occur in southern direction [669], as its [full] visibility always lies in opposite direction of the sun. Hence, if the sun is in the south [670], the [moon] is visible [as full moon] in the north and invisible in the south, and if the sun is in the north [671], it is the other

way round, i.e. the [moon] is visible [as full moon] in the south and invisible in the north. For that reason, it becomes cooling at this time, since its rays meet [the earth] at that time only in southern direction
q168 [672]. Furthermore, there is no need to assume that the evidence of the [moon's] mean courses [673] at fixed distances from the sun conflicts with [divine] providence for that which is in the present world.

One should apply what has been said about the sun and the moon accordingly to the case of the other stars, their spheres, and [the fact
j171 that] they have mean courses at fixed distances from the sun. In this sense Aristotle says that their course is [in accordance with] the course of the sun [674]. He says so because they are evidently influenced by the motion of the [sun] and desire to imitate it [675]. Although we
a162 cannot discern by the senses much influence [performed] by their motions, the eccentricity of their [orbits], and their progression and retrogression, we are absolutely convinced that [all] this is due to [divine] providence for that which is in the present world. It is just difficult to perceive this because it requires a period of observation longer than human life. Consequently, we have to take it for granted from those who practise empirical astronomy, that is those of their teachings about the influences of these stars which are credible. To be more precise, it must be possible to establish this [influence] through long observation, and it must also be possible that the stars [actually] have such an effect.

However, as stated repeatedly, in view of the nobility of these celestial bodies we do not think that their providence for that which is below them is by first intention [676]. Otherwise, the eternal would be for the sake of the transient, and the superior would be for the sake of the inferior. Furthermore, when they have providence for these [things] in that way, we cannot say that they fail to know things in the present world because the effect of the knower *qua* knower is known to him. However, their knowledge is [not like this, but rather] in the way we have explained [above][a] [677]. Since these [bodies] derive the order of their motions only through what they think of the essence of their
q169 principles, and [since] their principles derive it [ultimately] only from the first principle, which is God (praised and exalted), the primary

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a The Arabic text corresponding to 'because the effect ... explained [above]' is omitted in ms. *H* and not taken into consideration in the translations by Horten and Van den Bergh.

providence for us is only the providence of God (praised and exalted). He is the cause of anything that dwells on earth, and whatever exists here [on earth] in the state of pure good [678] [comes] from His will and His intention.

The existence of evils, on the other hand, is due to the necessity of matter, as in the case of decay and decrepitude and the like. This is so just for [the following reason]: There are [679] only two potential modes for this [sublunar] existence. Either there are no such things the existence of which is afflicted with a certain evil—but this would be an even greater evil—, or [these things] exist in this very disposition (for there are no other possibilities for their existence) [680]. E.g., the benefit of fire in the world is evident, even though [fire] happens to destroy many animals and plants by accident. But see the [divine] providence for animals, how they were provided with the sense of touch, as this was made possible by their nature, in order that they be safeguarded against sensible things that can destroy them! Similarly, each animal species is provided with what preserves its existence against things that can destroy it, and this again is in accordance with [the capability] to receive such [properties] found in the nature of the animal in question. This provides further evidence that there is [divine] providence for that which is here [in the sublunar world]. Consequently, if you consider this for a great number of living beings, it will become evident to you that they cannot exist, unless they are provided with the things through which their existence is preserved. This is most evident in [the case of] man and from [the fact] that if there were no intellect, [man] could not exist for [even] a [short] period of time. Therefore, we might believe that those principles know the sublunar evils according to their way of knowledge, and that their providence[a] for us is not confined to providing only our existence but also [includes] the things through which our existence is preserved against what could destroy us [681]. m 396r a 163 j 172

Alexander [of Aphrodisias] says: To say that [divine] providence applies to all particulars, as the Stoics used to hold, is also completely false. For according to what [has been established] above, the providence of those [principles] occurs only inasmuch as they have knowledge. [But] it is impossible that they have particular [and] generated q 170

a Reading, with I. Mantino ("eorum cura," fol. 396ra) and mss. *H, M*, and *G*^{marg}, *ʿināyatuhā* instead of *ghāyatuhā* ('their aim') in the remaining mss.

knowledge, not to mention that it [would have to] be infinite [682]. Moreover, he who holds this [position] ascribes [implicitly] a [kind of] necessitation [of evil] to the deity. For if there is a [divine] guidance
a164 directed towards each individual, how [else] could the individual be afflicted with evils, the deity being its guide? I mean here of the [different] species of evils those which occur potentially. As for evils occuring in the individual by necessity, these might [of course] be said[a] not [to come] from the deity [683]. However, most of those who hold this position regarding [divine] providence believe that for the deity everything is possible. Consequently, they have to ascribe [them] to the [deity]. But it is absolutely evident that not everything is possible. For it is not possible that the transient is eternal or that the eternal is tran-
j173 sient, just as it is impossible that the angles of a triangle ever become equal to four right angles or that colours become audible [684].

To teach such [things] is rather detrimental for the wisdom of mankind. Some think they [can] argue in favour of this [doctrine] by stating that [God's] acts do not admit injustice as [category of] description, but rather stand in an indifferent relation to good and evil [685]. However, such a statement is absolutely incompatible with human nature and conflicts with the nature of that being which is supremely good. For [in that case] there would be no essential good in the present world but [only] posited [good], and [similarly] there would be no essential evil. Thus it would be possible that the good turns into evil and the evil into good, so that there would be no truth at all in the present world. Even the glorification and worship of the first would be only a posited good,
m396v q171 [such that] the good might [just as well] consist in lapsing from worshipping it and in renouncing one's faith in its glorification [686]. All these are views similar to those [propounded by] Protagoras[b] [687]. We will attend to demonstrating the reprehensible consequences of these [views] in the chapter which follows this one, so God (exalted) will.

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a Reading, with the majority of the manuscripts, *fa-li-qāʾilin an yaqūla*. Ms. *M* and Mantino's *Vorlage* read *fa-laysa li-qāʾilin an yaqūla* ('these might not be said'), adopted by Quirós.

b Instead of 'Protagoras' I. Mantino and the Hebrew translation by Kalonymos b. Kalonymos falsely read 'Pythagoras' (cf. M. Steinschneider, *Die Metaphysik des Aristoteles in jüdischen Bearbeitungen*, p. 6, note 28).

At the present place, [our] discourse on the second part of this science [of metaphysics], that is the fourth chapter of our book, comes to its end[a] [688]. a 165

a Instead of the last sentence we read in Mantino's translation "Epitomes Auerrois in Librum Metaphysicae finis." After this sentence, Amīn adds *wa-bihī tamma l-kitāb* ('and with it the book is completed') for which there is no manuscript evidence.

NOTES

[1] The basic meaning of *iltaqaṭa* governing one object in the accusative and a second one introduced by *min* is 'to gather s.th. from/pick s.th. out of [a certain source]', cf. *WKAS* vol. II, part 2, p. 1093. Ibn Rushd, thus, indicates right at the outset of his treatise that he aims not at presenting a sort of abbreviated version or 'Epitome' (in the strict sense of the word) of the *Metaphysics* in its entirety and in the order of the Aristotelian text, but rather at discussing or explaining doctrines or sections selectively and arranged in a mode differing from that of the authoritative work. This is not exactly the method Ibn Rushd applied to the preceding Epitomes. However, the continuation of the present sentence suggests such a methodical coherence, probably in order to guarantee the unity of the overall project of Short Commentaries or Epitomes of the most important physical and metaphysical works by Aristotle. On the structure of these Epitomes cf. J. al-ʿAlawī, *al-Matn al-rushdī. Madkhal li-qirāʾa jadīda*, p. 52–59.

[2] These are the so-called *Jawāmiʿ tabīʿiyya* or *Epitomes of the Natural Sciences*, dealing with Aristotle's *Physica, De caelo, De generatione et corruptione,* and *Meteorologica* (in this order). The four Epitomes, completed in 554/1159, form a literary unit in its own right to which Ibn Rushd attached an introduction and an epilogue. However, in almost all manuscripts they have been transmitted together with the Epitome of *De anima* and the present work on the *Metaphysics*.

[3] The following 'Preface' or *ṣadr*, as Ibn Rushd calls it below, is composed of four parts which treat, following the ancient commentary tradition, (i) the aim of metaphysics, (ii) its parts, (iii) its usefulness, and (iv) its place in the philosophical curriculum. The term 'aim' *(gharaḍ)* does not, in this preface, refer to an end lying outside of this science, but rather to the objects and tasks of metaphysics. Basically, it encompasses that which is taken into consideration (referred to by the root *N-Ẓ-R* c. *fī*) and that which is stated or established (referred to by *aʿṭā* c. acc.) in this science.

[4] Cf. Ibn Rushd, *al-Ḍarūrī fī uṣūl al-fiqh (Mukhtaṣar 'al-Mustaṣfā')*, ed. J. al-ʿAlawī, p. 34 (N.B. If this is indeed what Ibn Rushd is referring to here, it corroborates al-ʿAlawī's assumption that *al-Ḍarūrī fī uṣūl al-fiqh* belongs to Ibn Rushd's early works; cf. J. al-ʿAlawī, *al-Matn al-rushdī*, p. 27 sq.). The following tripartition of the sciences does not correspond to Aristotle's tripartition propounded in *Metaph.* E 1 and *Topica* VI 6, of which the third part, the productive sciences or ποιητικαὶ ἐπιστῆμαι, are omitted (as in the later Peripatetic and Neoplatonic tradition). The same phenomenon occurs in Ibn Rushd's Middle Commentary on the *Topics* (cf. *Talkhīṣ Kitāb al-jadal*, ed. S. Sālim, p. 329) as also in his *Long Commentary on the Metaphysics*, where the *ʿulūm ṣināʿiyya* are mentioned because they occur in the Arabic translation of *Metaph.* VI (E) 1, 1025 b 26 and had to be set apart from the theoretical disciplines, while it is obvious that Ibn Rushd cannot make much sense of this term, cf. *Long Commentary on the Metaphysics*, p. 704. This corresponds with the fact that he speaks indistinctly of the productive power of τέχναι *(ṣanāʾiʿ)* and practical sciences in his commentary on *Metaph.* IX (Θ) 2, 1046 b 3. When Ibn Rushd employs now and then the concept of productive disciplines *(ṣanāʾiʿ fāʿiliyya)*, this has not much in common with Aristotle's τέχναι ποιητικαί; cf. also note 369.

[5] There is no explicit statement to this effect in Aristotle's *Posterior Analytics* (rather cf. *Analytica priora* II 21). Ibn Rushd refers presumably to his Short Commentary on the *Posterior Analytics* (no edition available) which forms part of his *Ḍarūrī fī l-Manṭiq* (also entitled *Mukhtaṣar al-Manṭiq*) composed c. 552/1157. Cf. also Ibn Rushd's explanations on universal and departmental sciences in the context of *Posterior Analytics* I 24 provided in his *Talkhīṣ Kitāb al-burhān*, p. 434–436 (ed. Jihāmī).

[6] Dialectic is universal not as a discipline which has a universal subject matter in the strict sense of the concept, but rather inasmuch as it may deal with any kind of entities as a general technique of discourse based on commonly accepted suppositions; cf. *An. post.* I 11, 77 a 26–35; Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 402; id., *Talkhīṣ Kitāb al-jadal*, p. 87–89. Sophistics is not mentioned in this context in the *Posterior Analytics* where we find it rather set apart from universal knowledge (cf. I 5, 74 a 26–29). However, sophistics may be depicted ex negativo as a universal discipline inasmuch as it deals with the accidental (cf. *An. post.* I 2, 71 b 9–11; *Metaph.* VI [E] 2, 1026 b 15)

which, as such, is not conjoined with any specific subject matter of this or that departmental discipline; cf. Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 372 (ed. Jihāmī).

[7] Again, there is no corresponding passage in the *Posterior Analytics*, but cf. Ibn Rushd's commentaries on *An. post.* I 7, 75 b 12–16, *Sharḥ al-Burhān*, p. 284sq., as well as on *Metaph.* IV 1, 1003 a 24–26, *Long Commentary on the Metaphysics*, p. 299, with similar explanations on the two departmental theoretical sciences.

[8] According to Aristotle the efficient cause (or principle of change) is, unlike the formal cause, temporally prior to its effect (cf. *Metaph.* IV 5, 1010 b 37f., XII 3, 1070 a 21). The present distinction is presumably influenced by Ibn Sīnā's approach to the complementarity of final and efficient causes and his determination of God as both efficient *and* final cause of all existence and of all essential perfection (for Ibn Sīnā, cf. R. Wisnovsky, "Final and Efficient Causality in Avicenna's Cosmology and Theology," *Quaestio* 2 [2002]).

[9] Cf. Aristotle, *Metaphysics* IV (Γ) 1, 1003 a 26sq.

[10] The physical proof of the existence of the first mover and its immateriality does not release metaphysics from dealing with general things, being *qua* being and its essential concomitants (as outlined above), because it does not provide the other most remote causes. These ultimate causes are not the subject matter of metaphysics, but rather something that is searched for in this science and apprehended by the study of the 'general things' *(umūr ʿāmma)* which form its subject matter (see below). Two Avicennian doctrines, the exclusion of ultimate causes as subject matter of metaphysics and the ontological concept of its universality, stand here side by side with Ibn Rushd's famous anti-Avicennian theory that only natural philosophy, rather than metaphysics, proves the existence of God *qua* first mover. The last part of the present sentence does not indicate an *additional* way of acquiring knowledge about the ultimate causes, as translated by Horten ("Diese Erkenntnis wird ferner erreicht..."), nor does it refer to the physical proof as a sort of precondition, as translated by Van den Bergh ("jedoch erst nachdem [...] in der Physik..."; omitting *ayḍan*). It rather maintains the validity of a universal science which seeks ultimate causes despite the (partial) determination of such ultimate causes prior to metaphysics, i.e. in physics (as in the translations by I. Mantino and Quirós).

[11] *Bayān [...] ʿalā l-takhṣīṣ* presumably refers to the fact that such a proof has to be based on what can be concluded from the study of the specific subject matter of physics, rather than on an apodictic proof ("ein apodiktischer Beweis") as translated by Van den Bergh. Cf. also below, p. 155 of the translation, as well as Ibn Rushd's *Commentarium magnum in Aristotelis Physica*, fol. 57 ra (A): "Primus autem Motor impossibile est vt declaretur esse nisi per signum naturale", and the translation and analysis of this section in A. Bertolacci, "Avicenna and Averroes on the Proof of God's Existence," p. 89sq.; cf. also Ibn Rushd's *Long Commentary on the Metaphysics*, p. 508, l. 2–11.

[12] Following Aristotle's *Topica* I 10, 105 a 10sqq., Ibn Rushd distinguishes between two kinds of dialectical speech (*aqāwīl jadaliyya*, λόγοι διαλεκτικοί), dialectical syllogistics *(qiyās jadalī)* and dialectical induction *(istiqrāʾ jadalī)*. The first draws conclusions on the basis of generally accepted, yet not necessarily true premises, the latter transfers a judgement about particular things or circumstances based on particular criteria onto universal things or circumstances. Both methods are inappropriate for claiming necessary truth; cf. Ibn Rushd, *Talkhīṣ Kitāb al-jadal*, p. 43, l. 6sqq., p. 437sq.

[13] *Aṣl mawḍūʿ* is the analytical translation of the epistemological technical term ὑπόθεσις, 'supposition', Ibn Rushd encountered in the translations of Aristotle's *Prior* and *Posterior Analytics*, e.g. *An. post.* I 2, 72 a 20–23; I 10, 76 b 23 – 77 a 4, etc. It is one of two kinds of what Aristotle calls a posit (θέσις, *waḍʿ*), i.e. a principle of syllogistics which cannot be proved and need not necessarily be known within a science in order to learn that science (*An. post.* I 2, 72 a 14–16). The supposition differs from the other kind of posit, the definition (ὁρισμός, *ḥadd*), in that it assumes either that something is or that something is not, whereas the definition posits what something is. Both kinds of posits, in turn, are distinct from the principle which likewise cannot be proved but must be known necessarily to practise any science, i.e. the axiom or general principle of demonstration (*An. post.* I 2, 72 a 16–23). A supposition can be universal or particular (*An. post.* I 10, 77 a 3sq.). Ibn Rushd follows this terminology and employs the term *aṣl mawḍūʿ* in this technical sense in various works, cf. *Sharḥ al-Burhān*, p. 192–194, 314–321; *Talkhīṣ Kitāb al-burhān*, p. 375, l. 9, p. 399sq.; *Talkhīṣ Kitāb al-qiyās*, p. 88, l. 12 – p. 89, l. 11 (ed. Badawī); *Talkhīṣ Kitāb al-maqūlāt*, p. 3, l. 10, etc.; cf. also the following note.

[14] *Wa-hiya aḥadu ajzāʾi mawḍūʿātihī* does not refer to a multiplicity of subject matters of metaphysics (as suggested in the translations by Horten, Quirós, and Van den Bergh), but rather to the fact that the specific suppositions (ὑποθέσεις) form part of that which is posited *(mawḍūʿ)* in any science. This includes not only the genus or subject matter, the common axioms and the attributes of the subject matter taken into consideration, but also suppositions and postulates (cf. *An. post.* I 10, 76 b 23 – 77 a 4).

[15] Ibn Rushd indicates here that the segmentation of the single treatises of Aristotle's *Metaphysics* does not correspond with its main topics. (However, "disordered" [Van den Bergh, p. 4] or "indistinct" [Horten, p. 5] as interpretations of *muntashiran* are rather exaggerative.) The various topics of these treatises can be reduced to a more basic division of the science. Ibn Rushd emphasizes, contrary to what is suggested in the two German translations, the well-structured arrangement of the Aristotelian books in his *Long Commentary on the Metaphysics*, p. 1405, l. 4sqq. But this statement has to be seen in the context of Nicolaus of Damascus' critical remarks on the structure of the *Metaphysics*. In any case, Ibn Rushd restructures in what follows the order of the Aristotelian text in a quite independent manner; cf. also Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

[16] From the last part of Chapter IV of the Epitome it becomes clear that Ibn Rushd is talking here about the attributes and powers of the celestial movers. These include common attributes such as oneness, intellectuality, life, etc. as well as individual attributes such as different kinds of motion and individual powers over the effects of their motion and their relation to matter.

[17] *Mawḍūʿāt al-ʿulūm al-juzʾiyya*, translated as "materias proprias" by Quirós, "Grundsätze" by Van den Bergh, and "Postulate" by Horten. I have argued elsewhere in extenso that Ibn Rushd refers here predominantly to the subject matters of the particular sciences, possibly including also the first principles of demonstration, as is suggested by the subsequent reference to logic and to principles *(mabādiʾ)* of the sciences. The reference is, thus, to books IV (Γ) 3–8, XIII (M) and XIV (N) of Aristotle's *Metaphysics*. Cf. my "On the Nature and Fate of Chapter V of Ibn Rushd's *Epitome* of Aristotle's *Metaphysics*," esp. p. 44–52, and below, notes 685, 687–88.

[18] Cf. Aristotle, *Posterior Analytics* I 9–10.

[19] That *mā* in the phrase *mā kāna min ḍarūrat hādhā l-ʿilm* serves as a particle of negation and not as a pronoun, as translated by Quirós, p. 13, Van den Bergh, p. 5, and Horten, p. 6, is clear from the immediately following sentence, in which Ibn Rushd states unmistakably that only the other two parts are necessary parts of metaphysics. (I. Mantino's translation, fol. 357 ra ult., is obviously based on a corrupted text, either in the Hebrew transmission or in the Arabic manuscript used by the Hebrew translator.) For Ibn Rushd's use of *mā* as negation in similar syntactic constructions see Ibn Rushd, *Tahāfut al-tahāfut (L'incohérence de l'incohérence)*. Texte arabe établi par M. Bouyges, Index E [Lexique grammatical], p. 672 s.v. *mā*; also id., *Talkhīṣ Kitāb al-ʿibāra*, p. 78, l. 12, p. 122, l. 6; as well as Ibn Rushd's *Talkhīṣ Kitāb al-maqūlāt*, p. 44 ult.

[20] The meaning of the phrase *ʿalā jihat al-afḍal* is not quite clear. One might also think about translating it through 'because [metaphysics] is the highest/most excellent [discipline]', thus referring to *Metaph.* IV (Γ) 3, 1005 a 33 – b 1. Quirós' translation ("en razón de mejoría", p. 13) is rather vague. The translation "zur Vervollständigung" (i.e. of metaphysics) provided by Horten and Van den Bergh is in my view not supported by the Arabic wording. Ibn Rushd often uses *al-afḍal* in epistemological and curricular contexts (e.g., *al-afḍal fī tartīb al-ʿilm, al-afḍal fī l-taʿlīm*, and similar phrases), and does so also with reference to metaphysics, cf. *Long Commentary on the Metaphysics*, p. 167, l. 5–10, p. 168, l. 7, p. 476, l. 3, etc. In all likelihood, it is this epistemological context that he has in mind in the present case.

[21] The first part of this sentence cannot be interpreted as a general epistemological statement as in the translations by Van den Bergh (p. 5) and Horten (p. 7), but only as a sort of historical report referring to Aristotle's decisive solution of any aporia and error concerning the principles and fundamentals of the sciences. Otherwise it would make no sense to open the following sentence with the adversative conjunction *lākin*, which as such makes explicit the relationship between the fact that the solution of these problems is not a necessary part of metaphysics and has already been completed by Aristotle and Ibn Rushd's explicit intention to include a separate chapter on this topic anyhow. (Such an interpretation is additionally supported by the his-

torical approach Ibn Rushd displays in the general introduction to the four epitomes of natural sciences with regard to the doubts and errors of other thinkers; cf. J. al-ʿAlawī, *al-Matn al-rushdī*, p. 161 sq., right column [the Cairo version].)

[22] Contrary to this statement and the testimony of all manuscripts, Horten and Jihāmī separate the introduction from Chapter I and fix the beginning of the first chapter before (Horten, p. 9) or after (Jihāmī, p. 38) the section on being *(al-mawjūd)*, p. 27–30 of the translation.

[23] Chapter V of the Epitome has not come down to us. It has either been lost through a codicological mishap in an early stage of the transmission or Ibn Rushd detached the original version of this chapter from the remaining text, in order to revise it, but was unable to finish this revision before his death. Cf. Arnzen, "On the Nature and Fate of Chapter V of Ibn Rushd's *Epitome* of Aristotle's *Metaphysics*."

[24] A statement to this effect is not found in Ibn Rushd's Epitome of Aristotle's *De anima*, the only treatise on this Aristotelian work which chronologically precedes the present writing on the *Metaphysics*. The present reference must have been added by Ibn Rushd in a later revision of the work.

[25] Cf. above, p. 24. For the term 'supposition' cf. notes 13–14.

[26] *Dalā'il* or *demonstrationes quia*. Following Aristotle, Ibn Rushd distinguishes basically between three kinds of apodictic proofs, the absolute proof *(burhān muṭlaq, demonstratio simpliciter)* which demonstrates simultaneously the existence and the cause of existence of something, the proof of why something is what it is *(burhān al-sabab* or *burhān limā, demonstratio propter quid)*, and the proof that something exists *(burhān al-dalīl* or *burhān an* or simply *dalīl, demonstratio quia*; cf. Ibn Rushd, *Sharḥ al-Burhān*, p. 180–184, 298, 354–358, 374 sq. The *dalīl* or *demonstratio quia* always draws conclusions from the fact that one thing exists to the fact that something else exists; this may concern an accident-substance relation or an effect-cause relation. In any case it goes from what is better known and prior to us to what is less known and farther from us, yet prior in being (cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 9 sq.). Thus, it is also called *burhān bi-l-iḍāfat ilaynā*, 'proof with respect to us', i.e., with respect to the natural procedure of human cognition from what is better known to

what is less known, as opposed to the proof with respect to the thing itself *(burhān bi-l-iḍāfat ilā l-amr fī nafsihī)*; cf. Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 378 sq. *Dalā'il* are not inductive conclusions inducing the universal from the particular, as interpreted by Horten (p. 8) and Van den Bergh (p. 154 ad loc.).

[27] The expression *bi-tartībin wa-tanāsub* is a hendiadys meaning *analogice*. I have not been able to find occurrences of this expression in other works by Ibn Rushd. Further below the expression is explicitly equated with *asmāʾ mushakkaka*, 'terms predicated *per prius et posterius*' (cf. Quirós, p. 144, l. 3 sq., Amīn, p. 140, l. 11, Jihāmī, p. 151, l. 10 sq.). In his Middle and Long Commentaries on *Posterior Analytics* and in the *Long Commentary on the Metaphysics* Ibn Rushd uses the terms *tanāsub* and *mutanāsib* in order to refer to predication *per analogiam* (κατ' ἀναλογίαν) which is not quite the same as πρὸς ἕν predication; e.g. *Sharḥ al-Burhān*, p. 341, l. 10–13, rendering *An. post.* I 12, 78 a 1–5, *Long Commentary on the Metaphysics*, p. 308, l. 2, p. 1507, l. 4 on *Metaph.* 1070 a 32, p. 1518, l. 10–16, p. 1552, l. 1–7 on *Metaph.* 1071 a 33. Cf. below, note 61, and the remarks on analogical predication in Ibn Rushd in M. al-Miṣbāḥī, *Taḥawwulāt fī tārīkh al-wujūd wa-l-ʿaql*, p. 163–177.

[28] From the examples supplied by Ibn Rushd as well as from the immediately following sentence it becomes clear that Ibn Rushd's concept of 'veridical being' is different from the Aristotelian one which refers to the quiddity or essence of something *qua* object of cognition (cf. *Metaph.* VI [E] 4, 1027 b 24, IX [Θ] 10, 1051 b 17 sqq.). The term *qawl* ('statement, utterance') points rather to a propositional concept of the type 'it is true that *p*' with *p* referring to an existential proposition of the type '*x* exists/does not exist'. Thus, the correspondence between that which is in the mind and that which is outside the mind does not refer to a single entity outside the mind and its representation in the mind (which is, according to Aristotle and Ibn Rushd, impossible in the case of the void), but rather to the relation between the fact of its extramental existence/non-existence and our knowledge of this fact; cf. also Ibn Rushd, *Tahāfut al-tahāfut*, p. 372, l. 12 – p. 373, l. 3.

[29] *Laysa yutaṣawwaru fī l-mawjūd al-mufrad* cannot mean 'is not conceivable in the individual/in the separate entity' ("ist in dem Einzeldinge [...] begrifflich nicht denkbar," Horten, p. 9, "kann man sich

nicht in der gesonderten Entität vorstellen," Van den Bergh, p. 7), as this is exactly what accidental being applies to. *'Fī'* in the present phrase does not mean 'in' or 'at', but rather 'in the way of' or 'as'; cf. also Quirós' translation "considerado aisladamente" (p. 18).

[30] There are no further references for the term *al-asmāʾ al-manqūla* in other works, where Ibn Rushd uses the first stem of the root *N-Q-L* in linguistic and rhetorical contexts in two different ways, first in cases where one word is replaced by a synonym (cf. *Talkhīṣ Kitāb al-jadal*, ed. S. Sālim, p. 98, 106), secondly and very frequently in the form *manqūl* in the context of literal transmission (especially together with *lafẓ* 'utterance' and *āthār*, 'tradition relating Muḥammad's deeds and utterances') in his *Bidāyat al-mujtahid*. None of these meanings seems to be applicable in the present case. The following sentence suggests that Ibn Rushd refers here to the difference between the use of *mawjūd* as adjectival passive participle ('present, found') in colloquial Arabic and its nominal use ('the existent') in technical philosophical terminology, that is a semantic difference which goes along with the transformation into another word class. Similarly, Ibn Rushd speaks below (p. 30 of the translation) about *huwa* employed as copula *(ḥarf)* in colloquial Arabic and its transformation into a noun in philosophical terminology, which is there again called *lafẓ manqūl*. I therefore do not agree with Van den Bergh's thesis according to which *manqūl* refers here either to a non-literal sense of the word or to a paronym (cf. Van den Bergh, p. 8, p. 156sq., note 8^2), but rather adopt Horten's interpretation (i.e., transformation into technical terminology) to which one has to add the concept of change in word class. In a similar sense al-Fārābī speaks of *asmāʾ* or *alfāẓ manqūla* as words used by the masses *(al-jumhūr)* in a general sense and by the philosophers as a specific technical term; cf. *Kitāb al-Ḥurūf*, p 160sq.; *Kitāb fī l-manṭiq: al-ʿIbāra*, ed. S. Sālim, p. 19sq., 23sq., transl. F. W. Zimmermann, p. 227sq., 230; *Jawābāt li-masāʾil suʾila ʿanhā*, ed. J. Āl Yāsīn, p. 97. For al-Fārābī's distinction between equivocation, homonymy, metaphorical speech and technical *vs.* colloquial terminology cf. C. Martini Bonadeo's explanations in Al-Fārābī, *L'armonia delle opinioni dei due sapienti il divino Platone e Aristotele*, p. 163–66.

[31] The Arabic word *wujida* can mean 'to be found' as well as 'to be (there), to exist'. For this and other Arabic philosophical terms expressing existence cf. G. Endress, *Proclus Arabus*, p. 79–109; F. Shehadi,

Metaphysics in Islamic Philosophy, p. 1–17. The example Ibn Rushd gives is adopted from al-Fārābī, *Kitāb al-Ḥurūf*, p. 110.

[32] The word *mawjūd* ('being') is a derived verbal form. The majority of Arabic adjectives is derived (in numerous ways) from verbal forms. Based on the assumption that accidents are often associated with adjectives, Ibn Rushd tries here to supply a morphological explanation for what he conceives as erroneous philosophical doctrine, the concept of being *(mawjūd)* as accident. The same argument is found in his *Long Commentary on the Metaphysics*, p. 557 sq.

[33] *Al-asmāʾ allatī hiya muthulun uwal*. The translations display remarkable differences: I. Mantino (fol. 358 ra) has "nominibus abstractis"; Quirós (p. 20) translates "los nombres primitivos"; Horten (p. 11) has "Ausdrücke [...] die ursprünglich (per se) etwas bedeuten (nicht per accidens)"; Van den Bergh (p. 8) "Worte [...] die primäre unabgeleitete Symbole sind". In a way, all these translations hit at least partially upon what Ibn Rushd seems to imply with the term *al-mithāl al-awwal*. Primarily this denotes a 'root morpheme', an abstract noun which serves as morphological root for the derivation of other nominal forms. This root morpheme is a univocal abstract concept (such as 'life') as opposed to the derived forms which often have equivocal meanings because they imply in addition to that univocal meaning of the root morpheme equivocal relations to the subject of which they are predicated (such as 'alive' which can be predicated of a subject in the sense of a potentiality or habitus, but also in the sense of actual form; cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1620 sq.

This terminology evidently draws on al-Fārābī's (meta-)linguistics which displays a similar, though slightly different concept of the *mithāl al-awwal*, cf. e.g., *Kitāb al-Ḥurūf*, p. 71, l. 13–15, p. 73, l. 19 – p. 74, l. 21, p. 111, l. 13–16, p. 112, l. 18, p. 114, l. 2–7, etc. (among the examples mentioned there are Persian *hast*, Greek ἔστιν ['to be'], and Arabic *insān* ['man'], *ḍarb* ['stroke'], or *shayʾ* ['thing']); also al-Fārābī, *Iḥṣāʾ al-ʿulūm*, p. 60 sq., *Kitāb fī l-manṭiq: al-ʿIbāra*, p. 23, l. 1–4, p. 27, l. 1 sq. Al-Fārābī does not define the *mithāl al-awwal* and it is difficult to grasp the meaning of this term. According to al-Fārābī, the meanings of root morphemes are known "by first imposition" *(fī l-waḍʿ al-awwal)*, i.e. they are first intentions *(maʿqūlāt uwal)*. However, they are not coextensive with first intentions, as the latter include proper nouns referring to an individual subject or object of predication (e.g. "Zayd")

whereas the former do not (*"maʿnā mithālin awwala ghayru dāllin ʿalā mawḍūʿin aṣlan wa-lā ʿalā mafʿūlin tuʿuddiya ilayhi fiʿlu fāʿilin"*, *Kitāb al-Ḥurūf*, p. 114, l. 2 sq.; but cf. S. Menn, "Al-Fārābī's *Kitāb al-Ḥurūf* and His Analysis of the Senses of Being," p. 65, who seems to equate first intentions and root morphemes). Root morphemes include species- and genus-terms, but also non-generic universal terms such as 'thing'. Morphologically, they are non-paronymous terms, and they must be so, because paronyms are somehow composed of simple words or morphemes and, thus, are inappropriate for denoting simple things. The root morphemes, on the other hand, are simple *(basīṭ)* and prior to any paronym. As al-Fārābī ascribes the theory of root morphemes to the ancients (*al-qudamāʾ*, cf. *Kitāb al-Ḥurūf*, p. 73, l. 23), the Socratic idea of πρῶτα ὀνόματα ('primary names') propounded and discussed in Plato's *Cratylus*, 422 a – 427 d, comes to mind. According to Socrates, all compound derivative names might be resolved into primary names which are assigned by the name-giver as elemental components (στοιχεῖα) of all names to the essence of the simple things and elementary facts they name by imitation. Such primary names cannot be analyzed into still other names, and they must be known prior to any derivative name. This theory is also alluded to in Plato's *Theaetetus*, 201 c – 210 d. However, neither of the dialogues has been translated into Arabic, as far as we know.

The immediately following sentence suggests that for Ibn Rushd such root morphemes have, in addition to their morphological primacy and their lack of semantic equivocity, an epistemological primacy, as essence is not only the first in being, but also πρῶτον λόγῳ καὶ γνώσει καὶ χρόνῳ; cf. *Metaph.* IV (Γ) 2, 1003 b 15–18; VII (Z) 1, 1028 a 29–33. For the relationship between root morpheme and definition, cf. p. 61 of the translation and note 214. For the conception of derived and non-derived forms in early Arabic linguistics cf. also C. Schöck, "Name *(ism)*, Derived Name *(ism mushtaqq)* and Description *(waṣf)* in Arabic Grammar, Muslim Dialectical Theology and Arabic Logic."

[34] The transmission of the present section obviously must have been somehow corrupted. This concerns especially the sentence *law kānat ... khulfan mina l-qawl* ('if ... in the substance'). As transmitted in the manuscripts this would mean 'it would be self-contradictory to say about the substance that it is a being (*or:* existent)', which is obviously not true. At best this would be a tautology rather than a contradiction,

as in fact translated by Horten (p. 11). Yet, Ibn Rushd never uses the term *khulf* in the sense of 'tautology', but frequently in the sense of self-contradiction. This problem leads Van den Bergh (p. 157, note 8[4]) to a far-fetched interpretation of the following clause which distinguishes between the use of *mawjūd* in this sentence and in the preceding section on the meaning of 'being' *qua* 'essence' and 'thing'. That it is this preceding section that Ibn Rushd is referring to is clear from the repeated reference by *wa-li-hādhā ... wa-li-hādhā ayḍan...* ('Therefore ... and it is for the same reason...'). I therefore propose the reading *qawlunā innahū fī l-jawhari mawjūdun* instead of *qawlunā fī l-jawhari innahū mawjūdun* which can be easily explained by a simple omission of *innahū* and its subsequent wrong replacement from a marginal or interlinear correction. According to this minor modification, the argument mentioned by Ibn Rushd in fact establishes an (alleged) contradiction, as in the one case 'being' is employed as a synonym of essence, whereas it refers in the other case to 'being in (*or:* at) a substance', i.e. something accidental.

[35] This sentence is still part of Ibn Rushd's rejection of the doctrine of being *qua* accident in the sense of primary intention, pointing to one of its unacceptable consequences (as correctly translated by Quirós, p. 21), not to Ibn Rushd's own doctrine (as wrongly translated by Horten [p. 12] and Van den Bergh [p. 9]). Cf. also *Metaph.* VII (Z) 1, 1028 a 13 sqq., and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 747, l. 7 sqq.

[36] The abstract noun *huwiyya* competes in the Graeco-Arabic translations and in early Arabic philosophy with the terms *mawjūd, anniyya,* and *aisa* as equivalents of Greek (τὸ) εἶναι and τὸ ὄν. In the translations of the *Metaphysics*, *huwiyya* stands significantly more frequently for the latter than for the former (cf. G. Endress, *Proclus Arabus*, p. 99 sq.). *Anniya* and *aisa* are not considered in the Epitome because they are used in the *Metaphysics* only as equivalents of τὸ τί ἦν εἶναι and metalinguistic τὸ ἔστι (the word 'is') or τὸ τί ἐστι (the expression 'what is'). The term *huwiyya*, translated here by 'entity', occurs in the Epitome only in the present short section. For its synonymy with the term *mawjūd* cf. also the *Long Commentary on the Metaphysics*, p. 305, l. 3 sqq., p. 557 sq. (The translations "individuality," Horten [p. 12], or "ipseity," Van den Bergh [p. 9], are misleading; correctly I. Mantino: "ipsum quod est," [fol. 358 vb].)

[37] *Al-alfāẓ al-manqūla*; cf. above, note 30.

[38] The sentence is misleading due to its conciseness. The reason why the translators thought *huwiyya* ('entity') to be less misleading is not that *huwiyya* is a derived form (as translated by Quirós, p. 22, Horten, p. 13, and Van den Bergh, p. 9). On the contrary, the reason why *mawjūd* ('being') is misleading is exactly that it is a derived form and easily recognizable as such to anybody acquainted with the Arabic language (cf. above, the remark to how the masses use the term 'being', p. 28 of the translation). *Huwiyya*, on the other hand, is a neologism, as such not recognizable as a derivative noun, and thus less easily mistaken for a word referring to something accidental; cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 557, l. 5 – p. 558, l. 6; also above, note 32. All this is heavily indebted to al-Fārābī's *Kitāb al-Ḥurūf*, esp. p. 111–115. For an in depth study on al-Fārābī's doctrine of how to predicate 'being' cf. S. Menn, "Al-Fārābī's *Kitāb al-Ḥurūf* and His Analysis of the Senses of Being," esp. p. 71–90.

[39] I follow I. Mantino and the three modern translations in taking *'wa-lā ʿalā mawḍūʿin aṣlan'* in the sense of *wa-lā yuqālu/yuḥmalu ʿalā mawḍūʿin aṣlan*. Such an interpretation corresponds with both the doctrine and the terminology unfolded in Ibn Rushd's *Talkhīṣ Kitāb al-maqūlāt*, p. 7, l. 10 – p. 9, l. 6, esp. p. 9, l. 3–6; cf. also *Sharḥ al-Burhān*, p. 451 sq. In addition, it is attested by the Epitome itself below, cf. p. 58, l. 9 of the translation (Quirós, p. 43, l. 12 sq., Amīn, p. 40, l. 8, Jihāmī, p. 65, l. 8).

[40] Cf. the preceding note.

[41] This sentence makes no sense in the form transmitted in all manuscripts, according to which Ibn Rushd would maintain that holding the opinion that 'substance' means first substance is the cause for maintaining that it means second substance, which is obviously absurd (and led the modern translators to very paraphrastic interpretations). What Ibn Rushd intends to point out is presumably the tension between the fact that the primary meaning of substance *qua* first substance is widely accepted and the fact that many of those he calls 'philosophasters' nevertheless prefer to understand 'substance' in the sense of second substance, which is not in a substrate but predicated of it (cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 7, l. 10 – p. 8, l. 3). I therefore propose to read ⟨*wa-*⟩*in* instead of *idh* (Quirós, p. 15, l. 7, Amīn, p. 11, l. 15, Jihāmī, p. 39, l. 1).

[42] Cf. *Metaph.* II (α) 1, 993 b 24–27.

[43] I.e., that the thing which is through itself the cause of another thing deserves most appropriately that its effect be predicated of it.

[44] For this distinction cf. Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 8, l. 3–12.

[45] Ibn Rushd refers to Aristotle's distinction between discrete and continuous quantities, *Categories* 6, 4 b 22sqq., or his own explanations on this distinction, *Talkhīṣ Kitāb al-maqūlāt*, p. 38, l. 6 – p. 42, l. 6. These two classes are properly (*'bi-l-ḥaqīqa', Talkhīṣ Kitāb al-maqūlāt*, p. 42, l. 8) or essentially (cf. the following sentence of the Epitome, corresponding with κυρίως, *Cat.* 5 b 38) called 'quantities', others are referred to by this name accidentally (κατὰ συμβεβηκός, *Cat.* 5 b 38, *bi-l-ʿaraḍ*, here and *Talkhīṣ Kitāb al-maqūlāt*, p. 42, l. 9).

[46] Aristotle counts the large and the small among the relatives rather than among the qualities (cf. *Cat.* 6, 5 b 11–29), in which he is followed by Ibn Rushd in his *Talkhīṣ Kitāb al-maqūlāt*, p. 44, l. 3–6, p. 45, l. 1–5. Ibn Sīnā mentions certain wiseacres *(mutaḥadhliqūn)* among the commentators of Aristotle who reckon the two accidents among the quantities; cf. Ibn Sīnā, *K. al-Shifāʾ: al-Manṭiq II. al-Maqūlāt*, p. 139, l. 4–17.

[47] These are (i) disposition and state (ἕξις καὶ διάθεσις), *Cat.* 8, 8 b 26–9 a 13; (ii) natural (in)capacity (δύναμις/ἀδυναμία φυσική), *Cat.* 8, 9 a 14–27; (iii) affective qualities (παθητικαὶ ποιότητες), *Cat.* 8, 9 a 28 – 10 a 10; and (iv) shape and external form (σχῆμα καὶ μορφή), *Cat.* 8, 10 a 11–24; cf. Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 71–79.

[48] This doctrine, which cannot be found in Aristotle's *Categories*, has been proffered by Ibn Sīnā in his *K. al-Shifāʾ: al-Manṭiq II. al-Maqūlāt*, p. 207sq.

[49] Ibn Rushd omits in this list an example for the relational use of the category of 'Having'. Such examples can be found in his *Talkhīṣ Kitāb al-maqūlāt*, p. 121, l. 7–9.

[50] Ibn Rushd refers to Aristotle's distinction between the relation of correlatives which reciprocate (τὰ ἀντιστρέφοντα) and those that do not reciprocate, *Cat.* 7, 6 b 28sqq. Only the first type of correlation is properly called πρός τι, and it refers, as a rule, to something essentially correlated, not to something accidental, cf. *ibid.* 7 a 22–30.

[51] In all manuscripts *al-maʿqūlāt al-uwal ... al-maʿqūlāt al-thawānī*. The translations provided by Horten (p. 18) and Van den Bergh (p. 13) are misleading.

[52] I.e., it does not imply or presuppose the actual existence of this thing, as opposed to the primary mode of terminology mentioned above. Cf. Ibn Rushd's *Sharḥ al-Burhān*, p. 317, where the term 'essence-of-something' *(dhāt al-shayʾ)* is explained as that which is given in the *Wesensdefinition* without implying the existence or non-existence of the thing in question. N.B.: The preceding lines on 'essence' are a paraphrase of al-Fārābī, *Kitāb al-Ḥurūf*, p. 106, l. 2–8.

[53] In his commentaries on Aristotle's *Posterior Analytics*, Ibn Rushd distinguishes between four types of essential predication *(ḥaml bi-l-dhāt)*; cf. Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 380–382, *Sharḥ al-Burhān*, p. 219–227, and below, note 166. N.B.: The following lines on the term 'essential' *(bi-l-dhāt* or *mā bi-dhātihī)* are a summary of al-Fārābī, *Kitāb al-Ḥurūf*, p. 107, l. 5 – p. 110, l. 2.

[54] All modern translations are wrong in reading *fī muqābili mā bi-l-ʿaraḍ* ('[...can be predicated] in opposition/as antonym to what is accidentally') instead of *fī muqābilin mā bi-l-ʿaraḍ* (as correctly by I. Mantino). The point of reference is *An. post.* I 4, 73 a 36sqq., where Aristotle gives examples of opposite essential accidents which are predicated of their subjects in an essential mode such as straight and curved of the line, odd and even of the number, etc. Although Aristotle does not use the term 'opposites' in this section, the paraphrastic Arabic translation employed by Ibn Rushd does so four times (cf. Ibn Rushd, *Sharḥ al-Burhān*, p. 226, l. 14–16). In his commentary on this section, Ibn Rushd deals with the accidentality of this opposition of essential accidents and the fact that they are nevertheless predicated essentially (cf. *ibid.*, p. 226–229).

[55] I.e., to predicate something in an essential mode of a substantial subject, not the immediately preceding mode of predication of opposite essential accidents.

[56] In the first case, the predicate is an essential part or constituent of the substance in question, in the second case, it is an essential accident or attribute. For the distinction of the two modes of predication and Ibn Rushd's explanation cf. Aristotle, *An. post.* I 4, 73 a 34 – b 5; Ibn Rushd, *Sharḥ al-Burhān*, p. 219–221.

[57] This mode of predication of *bi-l-dhāt* has its origin in *An. post.* I 4, 73 b 25–29: "I call universal whatever belongs to something both of every case and in itself and as such. It is evident, therefore, that whatever is universal belongs from necessity to its objects. (To belong in itself and as such are the same thing [...])", transl. J. Barnes. The paraphrastic Arabic translation used by Ibn Rushd renders this section as follows: "It is said that universal is *[i]* that which is predicated of the whole subject, and *[ii]* [that which is] essential to it, and *[iii]* inasmuch as it is found in it in a primary mode of existence. If this description applies to the universal, it [belongs] necessarily to the subject. There is no difference between saying that this predicate is found in the subject essentially and [saying] that it is found in it primarily"; cf. *Sharḥ al-Burhān*, p. 229, l. 8–10. On the basis of this section, Ibn Rushd considers (heavily criticizing al-Fārābī) the relation between *[i]* 'universal predication' *(al-ḥaml ʿalā l-kull)*, *[ii]* 'essential predication' *(al-ḥaml bi-l-dhāt)*, and *[iii]* 'primary predication *(al-ḥaml al-awwal)*. He states: (a) that which is predicated universally applies to the entire subject in all circumstances and at any time, is essential to it, and exists in it in a primary mode of existence. (b) That which is predicated primarily is neither more general than *(aʿamm min)* its subject nor predicated of its genus. (c) That which is predicated primarily is not predicated of its subject by means of an extrinsic (shared) nature, but rather by means of the cause which constitutes this subject (as colour is predicated of body by means of surface, which constitutes body). (d) Primary predication and essential predication differ in that all that exists in something else in a primary mode of existence is essential, but not all that is essential is in a primary mode of existence. (e) Primary predication and universal predication differ in that the first never refers to the genus of the subject, while the latter can refer to the genus and thus be employed in definitions requiring that the genus be stated. (f) Primary predications can serve as the premise of a *demonstratio quia*, but not as the premise of an absolute demonstration. Cf. *Sharḥ al-Burhān*, p. 229–235.

[58] Cf. the preceding note, final section.

[59] Ibn Rushd cites Aristotle's examples of non-existents, *Physics* IV 1, 208 a 30, τραγέλαφος ἢ σφίγξ, *ʿanzu ayyilin wa-ʿanqāʾu mughrib* in the Arabic translation of the *Physics* (Arisṭūṭālīs, *Al-Ṭabīʿa*, ed. ʿA. Badawī, vol. 1, p. 271, l. 10).

[60] Ibn Rushd refers with the term 'untrue proposition' *(qaḍīya kādhiba)* to a proposition which states what is not the case or that something does not exist. This terminology is, once again, influenced by the paraphrastic translation of the *Posterior Analytics*, where Aristotle sets forth as one of the conditions of correct demonstrations that the things on which they are based "must be true because one cannot understand what is not the case" (71 b 25, transl. J. Barnes). The Arabic translation renders οὐκ ἔστι τὸ μὴ ὂν ἐπίστασθαι by 'the untrue [premise] provides us with a knowledge of that which does not exist', in other words, it is untrue because it propounds knowledge of the unknowable (the non-existent); cf. *Sharḥ al-Burhān*, p. 184, l. 8 sq.

[61] The term '*asmāʾ mushakkaka'* seems to refer to words predicated πρὸς ἕν. Cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 387, l. 11 – p. 388, l. 2: "[T]here are things which have a common term different from the commonness of univocal or equivocal terms, but rather by the commonness of terms predicated in different ways with reference to one thing *(asmāʾ al-mansūba ilā shayʾ wāḥid al-mushakkaka)*, and [...] the characteristic of these things is that they lead upwards to a first term in this genus which is the first cause of everything to which this term refers, like warmth, which is predicated of fire and all warm things, and like the term 'existent' which is predicated of substance and all other accidents, and like the term 'movement' predicated of motion in space and all other movements," transl. Van den Bergh, p. 234 sq. (slightly modified). Below (translation, p. 116) *ism mushakkak* is explained as that which is predicated *secundum prius et posterius*. From two other passages of the present work it becomes clear that Ibn Rushd employs this term as a synonym of what he calls predication by analogy *(bi-l-tanāsub)* or by order and analogy *(bi-tartībin wa-tanāsub)* (cf. p. 52 and p. 155 of the translation, also above, note 27). In his *Long Commentary on the Metaphysics*, he uses neither of the two expressions when dealing with πρὸς ἕν predication, but adopts or modifies the terminology found in the translation speaking of terms referring to one thing *(al-mansūba ilā shayʾ wāḥid)* or to one nature *(al-mansūba ilā ṭibāʿ wāḥid)*, or terms predicated in relation to one *(bi-l-iḍāfat ilā l-wāḥid)*; cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 300–303, p. 802, 806. On the different modes of πρὸς ἕν predication, cf. *ibid.*, p. 303, and M. al-Miṣbāḥī, *Taḥawwulāt fī tārīkh al-wujūd wa-l-ʿaql*, p. 163–177. For Aristotle, 'one' belongs to the πολλαχῶς λεγό-

μενα, not to the πρὸς ἕν λεγόμενα, cf. *Metaph.* V (Δ) 6, and X (I) 1. Ibn Rushd's use of the term '*asmāʾ mushakkaka'* is prefigured by al-Fārābī; cf. al-Fārābī, *Jawābāt li-masāʾil suʾila ʿanhā*, p. 87 sq.

[62] This refers presumably to the modes of primary and *per se* predication (τῶν πρώτων καὶ καθ' αὑτα λεγομένων) of 'one' (as opposed to accidental predication), of which the continuous is the first and most comprehensive class, cf. *Metaph.* X (I) 1, 1052 a 17 sqq. I therefore do not follow the translations of Quirós (p. 33) and Van den Bergh (p. 15), who read the following *wa-ashharu dhālika* not as the beginning of a new clause, which explains one of the modes subsumed under the heading of primary predication, but rather as an apposition to *awwalan* ('in a primary mode'), thus restricting primary predication of 'one' to the continuous.

[63] This sentence does not refer to the one *qua* continuous (as translated by Quirós [p. 33] and Van den Bergh [p. 15]), but rather to the one *qua* whole, cf. *Metaph.* V (Δ) 6, 1016 b 13, X (I) 1, 1052 a 22, of which Aristotle says that it "is *one* in a still higher degree" (transl. W. D. Ross), and which Ibn Rushd takes here and in his *Long Commentary* as referring to 'the whole' *(al-kull)* and 'the perfect' (*al-tāmm*). For the equation of the one *qua* whole and *qua* perfect, cf. *Long Commentary on the Metaphysics*, p. 542, l. 11 and l. 18 sq., p. 543, l. 10 sq. Both the explanation as well as the examples provided in the *Long Commentary* are almost identical with what Ibn Rushd states here in the Epitome; cf. *ibid.*, p. 542, l. 17 – p. 543, l. 3.

[64] All manuscripts including I. Mantino read *muttaṣilan bi-dhātihī* ('continuous by its essence') except ms. *H* which reads *muttaṣilan bi-l-wahm* ('continuous by imagination') and ms. *D* which reads *muttaṣilan bi-dhātihī bi-l-wahm* ('continuous by its essence in the imagination'). Obviously, the copyist of *D* interpolated a marginal or intelinear correction, either *bi-l-wahm* for *bi-dhātihī* or vice versa. I follow the reading of ms. *H*, because it is confirmed by the text of the Epitome itself: On the following page, Ibn Rushd distinguishes between different kinds of that which is conceived as unity or as something isolated. Among these, he mentions that which is isolated by imagination *(bi-l-wahm)* and explains that this concerns the way we attach number, i.e. numerical oneness, to the continuous. The same is reiterated in Chapter III of the Epitome; cf. below, p. 36, l. 16 sq. and p. 112, l. 5 sqq. of the translation.

[65] Aristotle mentions water and other fluids as examples of that which is one both by its form (εἶδος) and by its substrate (ὑποκείμενον), *Metaph.* V (Δ) 6, 1016 a 17–24. As in the present section, in his Long Commentary Ibn Rushd also extends Aristotle's examples to the general notion of homeomeric bodies (cf. *Long Commentary on the Metaphysics*, p. 532 sq.). Thus, the phrase 'by something in it' *(bi-maʿnan fīhi)* refers presumably to this oneness of form and substrate, which is constituted, as explained in the Long Commentary, by the fact that name, definition and material substrate are always one and the same in all parts and in the whole of the thing in question. However, while Ibn Rushd follows Aristotle in his Long Commentary in saying that this fact yields a class of oneness in its own right, he subsumes it here under the category of oneness by continuity. This may be explained by the fact that both kinds of 'one' share one common feature: that which is called 'one' in either class is divisible in continuous parts, cf. *ibid.*, p. 540, l. 15 sq.: "the one by continuity is divisible into parts which are [themselves] again continuous, and the same [applies to] the numerical one with respect to homeomeric bodies" *(al-wāḥid bi-l-ittiṣāli yanqasimu ilā ajzāʾin hiya ayḍan muttaṣilatun wa-ka-dhālika l-wāḥidu bi-l-ʿadadi mina l-ajsāmi al-mutashābihati l-ajzāʾ)*. From this it is not far to the conclusion that not only that which is one by continuity, but also homeomeric bodies are continuous. (In the present section, I do not follow Horten and Van den Bergh who adopt the unique variant reading *bi-l-wujūd* instead of *muttaṣilan bi-maʿnan fīhi* as attested by all other mss. including I. Mantino).

[66] Cf. Aristotle, *Physics* V 3, 227 a 9–16; *Metaph.* V (Δ) 6, 1016 a 4–7, X (I) 1, 1052 a 25 sq. Both the translation employed by Ibn Rushd as well as the lemma of his *Long Commentary on the Metaphysics* read καθ' αὐτὰ δὲ συνεχῆ ὅσα ἁφῇ ἕν instead of καθ' αὐτὰ δὲ συνεχῆ ὅσα μὴ ἁφῇ ἕν; cf. *Long Commentary on the Metaphysics*, p. 527, l. 8 sq., p. 529, l. 13 sqq.

[67] *Al-ashyāʾ al-multaḥama* stands here (as in Ibn Rushd's *Long Commentary*) for things joined by organic unity or adhesion (what Aristotle calls συμπεφυκέναι or προσπεφυκέναι). For the oneness of such things cf. *Metaph.* V (Δ) 4, 1014 b 20–25, and Ibn Rushd's *Long Commentary* ad loc., p. 509 sq. Members with a joint have different motions, those without only one. For the examples hand and leg cf. also *Metaph.* V (Δ) 6, 1016 a 11 sqq., Ibn Rushd, *Long Commentary on the Metaphysics*, p. 530, l. 10–12, p. 540, l. 18.

[68] Cf. *Metaph.* V (Δ) 6, 1016 a 4, X (I) 1, 1052 a 23sq.

[69] This is the mode of oneness to which Aristotle refers as 'one' by formula (λόγῳ) and 'one' in kind (εἴδει); cf. *Metaph.* V (Δ) 6, 1016 a 32 – b 6, X (I) 1, 1052 a 29–34. 'Form' *(ṣūra)* in this context means form of the species, cf. below, p. 40 of the translation, and *Long Commentary on the Metaphysics*, p. 540.

[70] Here and in the following section I use 'to isolate' and similar expressions, in order to render verbal and nominal forms of the seventh stem of the root *Ḥ-W-Z.* There occurs a number of closely related terms: those formed by the root *F-R-D* are translated by '(to) set apart' or 'individual', those derived from the third and eighth stems of the root *F-R-Q* by 'to separate, separated', etc., those derived from the seventh stem of the root *F-Ṣ-L* are rendered by 'discrete' or expression containing the term 'discrete'.

[71] The following section up to p. 38 ('While the masses do not know any further meaning of 'one') gives a translation of the below Arabic text, the constitution of which is based on my examination of manuscripts and editions. This text is supposed to replace the following lacunose and confused sections of the previous editions: *idh laysa ... akthara min hādhā* p. 21, l. 2–22, ed. Quirós, p. 17, l. 14 – p. 18, l. 9, ed. Amīn, *wa-min hādhihi l-jiha ... akthara min hādhā* p. 44, l. 5 – p. 18, l. 6, ed. Jihāmī. It contains a short passage in two different versions, printed here in two columns. It is worth noticing that ms. *H* omits both versions of the section in question, while ms. *M* contains only the version printed and translated in the right column. The remaining manuscripts contain both versions (at different places). I have not been able to determine which of these versions is the original one, and which the revised text. Their absence from ms. *H* possibly points to a late date of composition and revision (cf. "Translator's Introduction," p. 9–11).

ومن حيث هي غير منقسمة إذ ليس يتصور في بادئ الرأي من معنى الوحدة والواحد غير هذه ولذلك قيل في حدّ الوحدة العددية إنها التي بها يقال في شيء شيء إنه واحد فمن هذه الاشياء ما هي منحازة بأماكنها التي تحويها وهو أشهر الانحيازات ومنها ما هي منحازة بنهاياتها فقط وهي المتماسّة ومنها ما انحيازها بالوهم فقط وبهذه الجهة يلحق العدد المتّصل وإذا كان هذا هكذا فالواحد العددي في هذه الاشياء إنما يدلّ منها على أمور هي خارجة عن ذاتها وبالجملة على أعراض لاحقة لها في الفهم والذهن

ومن هذه الجهة يحدث في الذهن الواحد الذي هو مبدأ العدد وذلك أن العقل إذا جرّد من هذه الاشخاص هذا المعنى الغير منقسم إلى شخصين أو أكثر من ذلك كان ذلك هو الواحد الذي هو مبدأ العدد فإذا كرّره الذهن حدث العدد

ومن هذه الجهة يجرّد العقل معنى الواحد الغير المنقسم الذي هو مبدأ العدد فإن العقل ليس يفهم في شيء ما أنه غير منقسم في حال من أحواله إلا أن يفهم أن فيه معنى غير منقسم على الاطلاق كما أنه ليس يفهم انفصال شيء عن شيء إلا بعد فهمه الانفصال فإذا كرّر العقل الواحد المطلق حدث الكم المنفصل باطلاق وهو العدد وصار كلما يعدّ إنما لحقه العدد بتوسّط العدد المطلق

ومن هذه الجهة يكون العدد داخلا من بين المقولات العشر في جنس الكم ويكون الواحد مبدأ له إذ كان العدد إنما هو جماعة الآحاد التي بهذه الصفة ومكيالا إذ كان العدد إنما يقدر بالواحد ومن قبله لحق التقدير للاشياء التي يوجد فيها أوّل بالطبع أعني الغير المنقسم في ذلك كالأوّل في جنس الكيفيات وجنس المقدّرات والجمهور ليس يعرفون من معنى الواحد أكثر من هذا.

[72] In this section Ibn Rushd deals with *Metaph.* V (Δ) 6, 1016 b 17–31 and X (I) 1, 1052 b 15sqq., Aristotle's explanation of the cognitive primacy of the concept of the indivisible unit which is the starting point of number *qua* number and on which any grasp of unity and indivisibility in quantity depends. As in his Long Commentary on 1052 b 14–20, Ibn Rushd points here to the cognitive primacy of the concept of the discrete quantity with regard to any cognition of that which is measurable; cf. *Long Commentary on the Metaphysics*, p. 1246–1248. Only very briefly does he mention that the one *qua* indivisible measure is also the principle of measurable unities in the category of quality (cf. *Metaph.* X [I] 1, 1053 b 4–8; Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1266sq.).

[73] Taking the following sentence into consideration, it is clear that Ibn Rushd refers here to *Metaph.* V (Δ) 6, 1016 b 3–5. As a matter of fact, these lines are an almost literal paraphrase of Aristotle's wording: "[I]n general those things that do not admit of division are one in so far as they do not admit of it, e.g. if something *qua* man does not admit of division, it is one man; if *qua* animal, it is one animal" (transl. W. D. Ross). We are, thus, not dealing with the relation of 'one' and 'being', but rather with the relation of 'one' and essence or essential oneness. The reading *li-l-mawjūd*, which in some manuscripts is added to the

phrase *murādifan li-dhāti l-shayʾi wa-māhiyyatihī*, and in others replaces it entirely, is inappropriate both with respect to the syntax as well as with respect to the contents of the sentence and either must have been inserted from a marginal note or in order to fill a lacuna (for omitted *li-dhāti l-shayʾi wa-māhiyyatihī*).

[74] According to Aristotle, the continuous is divisible *ad infinitum*; cf. *Physics* I 2, 185 b 10.

[75] As usual, Ibn Rushd's presentation of Avicenna's doctrine is rather wayward; cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3, p. 106, l. 10 – p. 108, l. 3 (transl. M. E. Marmura, p. 81 sq.).

[76] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3, p. 108, l. 4 – p. 109, l. 4 (transl. Marmura, p. 82 sq.).

[77] Cf. below, p. 111–31, esp. p. 116–9 of the translation.

[78] Cf. Aristotle, *Metaph.* X (I) 1, 1052 a 29 sq.: ὧν ἂν ὁ λόγος εἷς ... ὧν ἡ νόησις μία.

[79] Cf. Aristotle, *Metaph.* V (Δ) 6, 1016 a 35 sq.: οὕτω γὰρ καὶ τὸ ηὐξημένον καὶ φθῖνον ἕν ἐστιν, ὅτι ὁ λόγος εἷς, on which Ibn Rushd comments: "He means: of this kind are the things which have different definitions, but one and the same substrate, such as that which has increased or is diminishing, for that which accepts increase and diminution is part of the definitions of increase and diminution," *Long Commentary on the Metaphysics*, p. 538.

[80] Up to now, Ibn Rushd has distinguished between two major kinds of essential predication of 'one', (i) 'one' *qua* numerical one, and (ii) 'one' predicated of what is numerically multiple. Under these two categories he groups together the different types of what Aristotle indiscriminately calls 'essentially predicated one' (*Metaph.* V [Δ] 6, and X [I] 1). Leaving aside the meanings of 'one' in colloquial speach, the first kind includes various types of the continuous, 'one' in form, number, various types of that which is indivisible or 'isolated', and separate substances. The second kind includes the five types just mentioned (note that 'one' by accident is distinct from accidental predication of 'one'!). The difference between 'one' in form mentioned in the first group and 'one' in species mentioned in the second group is not clear, especially as Aristotle refers to both together (cf. *Metaph.* V [Δ] 6, 1016

a 32 – b 6, X [I] 1, 1052 a 29–34) and is followed in this respect by Ibn Rushd in his *Long Commentary on the Metaphysics*, p. 540. The following section deals with accidental predication of 'one'.

[81] I.e., it requires the combination of (1) the concept of the oneness or simultaneity of the existence of the two accidents in the substance in question and (2) the concept of the oneness of this substance. Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 526 ad *Metaph.* V (Δ) 6, 1015 b 32–34: "We say of the musician and the architect that they are one by accident in so far as these two exist in two parts of that which is one, and in so far as this existence of the two in these two parts is of one and the same kind and nature, I mean the nature of an accident."

[82] Cf. Aristotle, *Metaph.* X (I) 2, 1053 b 27 sq.: ὅλως ζητητέον τί τὸ ἕν ὥσπερ καὶ τί τὸ ὄν.

[83] The principle *qua* existent is the one universal nature of the genus which *exists* in one and the same way in all things pertaining to this genus. The principle *qua* one, on the other hand, coincides with the principle *qua* existent in being one and in being principle of the genus. However, it does *not* exist in one and the same way in all things pertaining to this genus, but rather is predicated of these by πρὸς ἕν predication; cf. *Metaph.* X (I) 2, 1054 a 5–12, and Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1276, l. 14 – p. 1277, l. 14, and below (end of section [7]).

[84] For this addendum on the numerical one cf. *Metaph.* V (Δ) 6, 1016 b 24–31.

[85] Section [8] is of special interest as it deals with Chapters 9 and 10 of *Metaph.* V (Δ) omitted in Ibn Rushd's *Long Commentary on the Metaphysics* (p. 567). It confirms Bouyges' speculation that the lacuna in the *Long Commentary* has not been caused by a corresponding omission in the Arabic translation from the Greek; cf. M. Bouyges, *NOTICE*, p. clii.

[86] There is no need to follow the unique reading *ʿalā jihātin muʿādila* in ms. *H* (as do Amīn, p. 22, and Van den Bergh, p. 18, "in analogen Bedeutungen"). *Muʿād* in the meaning of mirroring or mutually corresponding modes of predication occurs several times in the Epitome and is also attested with this meaning in Ibn Rushd's *Talkhīṣ Kitāb al-qiyās*

and *Talkhīṣ Kitāb al-mughālaṭa*. Cf. also Aristotle, *Metaph.* V (Δ) 9, 1018 a 5: τὰ δὲ καθ' αὐτὰ (*scil.* ταὐτὰ λέγεται) ὁσαχῶσπερ καὶ τὸ ἕν.

[87] Arabic naming practices allow one to refer to one and the same person by different types of names. The types mentioned here as example are, first, the *ism* or proper name (here: 'Muḥammad'), secondly, the *kunya* or honorific surname usually referring to the eldest son (father of... / mother of ..., here: 'father of ʿAbdallāh'). In the edition by Amīn (p. 22) and in the translations by Horten (p. 25) and Van den Bergh (p. 18) the *kunya* has been replaced by another type of name, the *nasab*, a pedigree or patronymic (son of... / daughter of...). Through this replacement, for which there is no manuscript evidence, it is possible to relate both names adduced by Ibn Rushd as example to the Islamic prophet Muḥammad. In my view, this is an islamophile hypercorrection. Due to the wide-spread and common Arabic naming practice, Ibn Rushd's example was clear to any Arab reader who understood the philosophical context to some degree. Otherwise, one would be hard pressed to explain how all copyists, in all probability learned muslims, could have followed this 'incomprehensible' example instead of 'correcting' it according to what was common knowledge. (For a similar example cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.2, p. 97.)

[88] Namely, apart from metaphysics, especially *Topica* VII 1, and *Categories* 5, 4 a 10sqq.

[89] Aristotle explains that statements propounding accidental sameness are made not universally (καθόλου οὐ λέγεται), but rather with respect to individual cases (cf. *Metaph.* V [Δ] 9, 1017 b 33 – 1018 a 4). This is presumably what Ibn Rushd refers to by *ʿalā jihat al-taḥdīd* ('in a delimited context', or 'by way of delimitation'). However, the sentence is not quite clear and may by interpreted in other ways (cf. transl. Quirós, p. 41, note 1, Horten, p. 25, and Van den Bergh, p. 19).

[90] Cf. Aristotle, *Metaph.* V (Δ) 15, 1021 a 11sq.: ταὐτὰ μὲν γὰρ ὧν μία ἡ οὐσία, ὅμοια δ' ὧν ἡ ποιότης μία, ἴσα δὲ ὧν τὸ ποσὸν ἕν. In his *Long Commentary on the Metaphysics* (p. 615), Ibn Rushd uses almost the same Arabic words as here in the Epitome to render sameness in substance *(mumāthil,* or *yumāthilu ṣāḥibahū)*, in quantity *(musāwin,* or *mutasāwin)*, in quality *(shabīh,* or *mutashābih)*.

[91] On the latter two modes of predication cf. *Metaph.* X (I) 3, 1054 b 7–11 and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1291, l. 11 – p. 1293, l. 12. On 'more and less' in affective and passive qualities cf. also Ibn Rushd's commentary on *Categories* 8, 10 b 26sqq., *Talkhīṣ Kitāb al-maqūlāt*, p. 84sq.

[92] The same meaning of 'like' appears also in *Metaph.* X (I) 3, 1054 b 11–13 and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1293, l. 13 – p. 1294, l. 5.

[93] Cf. Aristotle, *Cat.* 10–11, and Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 93–110.

[94] Cf. Aristotle, *Cat.* 6, 6 a 17sq.; Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 47, l. 8sq., *Cat.* 11, 14 a 19–24, and Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 109, l. 9sqq.

[95] Cf. Aristotle, *Metaph.* V (Δ) 10, 1018 a 25sq.: ἐναντία λέγεται τά τε μὴ δυνατὰ ἅμα τῷ αὐτῷ παρεῖναι τῶν διαφερόντων κατὰ γένος. Ibn Rushd is not quite correct in suggesting that this type of contrariety has not been mentioned in the *Categories*. As a matter of fact, Aristotle deals there with contraries which are themselves in contrary genera, such as justice and injustice, which belong, according to Aristotle, to the genera virtue and vice (cf. Aristotle, *Cat.* 11, 14 a 19–23, and Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 109, l. 9sqq.). However, these contrary genera are of course both included in the next wider genus (here: ἕξις), and perhaps Ibn Rushd interprets *Metaph.* 1018 a 25sq. as referring to contraries which have no such common genus at all. But what kind of contrariety could that be?

[96] Obviously, Ibn Rushd is trying to make sense of Aristotle's tautological phrase τὰ δ'ἄλλα ἐναντία λέγεται [...] τὰ δὲ τῷ ποιητικὰ ἢ παθητικὰ εἶναι τῶν τοιούτων, ἢ ποιοῦντα ἢ πάσχοντα (*Metaph.* V [Δ] 10, 1018 a 31–34), interpreting the first part in terms of causal relations, the second part in terms of contrary potencies of action and reception. Taken as such, an example of the first relation would be a medicine which, being as such healthy, causes illness, an example of the second the physician who potentially effects health but is himself potentially affected by illness.

[97] Cf. Aristotle, *Cat.* 10, 12 a 28–34, and Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 97, l. 3–5.

[98] This kind of privation is not mentioned in the *Categories*. On the contrary, Aristotle excludes explicitly any change from privation into possession (cf. *Cat.* 10, 13 a 31–33), and is followed in this doctrine by Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 104, l. 4–7. Possibly, Ibn Rushd refers here to his interpretation of *Metaph.* V (Δ) 22, 1022 b 35 – 1023 a 1, a difficult passage which he read in a rather vague Arabic translation of the following content: "[Privation ...] is predicated of the footless [1] because it has no feet at all, and [2] because [the feet] are paralysed, and also [3] of that which has [only] small capability of walking like somebody who is said to be without power because he suffers from some weakness" (*Long Commentary on the Metaphysics*, p. 643, l. 9 – p. 644, l. 2). On the basis of this translation, Ibn Rushd distinguishes between three modes of privation: "There are three meanings of privation of that which occurs naturally in a thing: [1] One is pure privation, as when we predicate 'footless' of him who is entirely deprived of his feet, [2] the other is when his feet are disabled so that he walks as if his legs were crooked, and [3] 'footless' is also predicated of him who has weak feet, e.g. feet wounded by a hatchet [reading *al-ṭabar* instead of *al-ṭayr*]," *ibid.*, p. 648, l. 3–7. The third type of privation mentioned here is obviously a temporary privation which might change into possession, namely the natural ability to walk. It thus fits with what Ibn Rushd describes in the Epitome as second type of privation, while the second type mentioned in the *Long Commentary on the Metaphysics* seems to correspond with the third type of the Epitome.

[99] Cf. *Metaph.* IX (Θ) 1, 1046 a 31–33, and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1116, l. 9 sq.

[100] Cf. *Metaph.* V (Δ) 22, 1022 b 24 sq., and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 645, l. 1–7.

[101] According to Aristotle, this is not an opposition of the type privation *vs.* possession, but a contrariety; cf. *Metaph.* X (I) 9, 1058 a 29 sqq. Ibn Rushd probably relies on al-Fārābī or Ibn Sīnā, *K. al-Shifāʾ: al-Manṭiq II. al-Maqūlāt*, p. 247, l. 2.

[102] Cf. *Metaph.* IX (Θ) 1, 1046 a 31–33. The usual example is the beardless boy; cf. *Long Commentary on the Metaphysics*, p. 1116, l. 11 sq., p. 1313, l. 10 sq., also Ibn Sīnā, *K. al-Shifāʾ: al-Manṭiq II. al-Maqūlāt*, p. 246.

[103] Cf. *Metaph.* V (Δ) 9, 1018 a 9–11; X (I) 3, 1054 b 14–17.

[104] The present section is a paraphrase of *Metaph.* X (I) 3, 1054 b 24–27.

[105] Cf. *Metaph.* V (Δ) 12, 1019 a 32 – b 1. For 'productive disciplines' *(ṣanāʾiʿ fāʿila)* cf. above, note 4, and below, note 369.

[106] To be more precise, from what is produced by art. I.e. natural things have the principle of change in themselves, whereas the principle of change is always extrinsic to things produced by art; cf. below, p. 96sq. of the translation. The relevant context is the beginning of *Metaph.* V (Δ) 12: Δύναμις λέγεται ἡ μὲν ἀρχὴ κινήσεως ἢ μεταβολῆς ἡ ἐν ἑτέρῳ ἢ ᾗ ἕτερον, οἷον ἡ οἰκοδομικὴ δύναμίς ἐστιν ἢ οὐχ ὑπάρχει ἐν τῷ οἰκοδομουμένῳ, ἀλλ' ἡ ἰατρικὴ δύναμις οὖσα ὑπάρχοι ἂν ἐν τῷ ἰατρευομένῳ, ἀλλ' οὐχ ᾗ ἰατρευόμενος.

[107] These four types of potency correspond with those mentioned by Aristotle, *Metaph.* V (Δ) 12, 1019 a 15–32. The last clause does not refer to a certain discourse or chapter on quality, as translated by Quirós (p. 45), Horten (p. 29), and Van den Bergh (p. 21), but rather subsumes Aristotle's examples of that which can hardly be 'broken, crushed and bent' under the heading of qualitative potencies (cf. Ibn Rushd's *Long Commentary on the Metaphysics*, p. 584, l. 1sq.: "Such potencies form the genus of qualities to which one refers as natural potency and incapacity").

[108] Ibn Rushd refers to the terminology of commensurability coined by Euclid. In *Elements* X, def. 2–4 straight lines (in)commensurable in square are called εὐθεῖαι δυνάμει (ἀ)σύμμετροι. The extant Arabic translations do not exactly display the terminology referred to by Ibn Rushd here. Instead of verbal phrases with *qawiya* c. *ʿalā* we find there the expression *mushtarak fī l-quwwa*. For the translation quoted by Aḥmad ibn ʿUmar al-Karābīsī, cf. S. Brentjes, "Aḥmad al-Karābīsī's Commentary on Euclid's 'Elements'," p. 71; for the translation quoted by Ibn al-Haytham, cf. Ibn al-Haytham, *Commentary on the Premises of Euclid's Elements. Sharḥ Muṣādarāt Uqlīdis*, p. 144, l. 6sq., p. 145, l. 1sq. (p. 323, l. 11sq., p. 324, l. 4–6) quoting *Elements* X, def. 2. It is not clear whether Ibn Rushd knew another translation or modified the terminology of these translations for his own purposes. As for the variant readings of the present sentence of the Epitome, one should read, in all

likelihood, *munṭaqan* instead of *munqaṭiʿ* ('segmented') which makes no sense and for that reason was omitted in one branch of the transmission. Straight lines which are commensurable in square are 'rational' (ῥηταί, cf. Euclid, *Elements* X, def. 3), and commensurable squares over rational straight lines are also rational, *Elements* X, def. 4. This is apparently the case Ibn Rushd is referring to. Both extant Arabic translations render ῥητός by *munṭaq*; cf. Brentjes, *ibid.*; Ibn al-Haytham, *Commentary on the Premises of Euclid's Elements*, p. 146, l. 18 sq., p. 149, l. 8 (p. 326, l. 1, p. 328, l. 8), also Ibn al-Haytham's explanation of the term *munṭaq*, *ibid.*, p. 148, l. 11 sqq. (p. 327, l. 15 sqq.). (I wish to thank Gregg de Young for calling my attention to the relevant sections of Ibn al-Haytham's commentary.)

[109] Cf. *Metaph.* IX (Θ) 1, 1046 a 5–8. For predication by similarity or comparison *(qawl bi-ṭarīq al-tashbīh)*, which should not be mistaken for equivocal or analogical predication, cf. below, note 292.

[110] Cf. *Metaph.* IX (Θ) 7, 1049 a 24 sq.

[111] This rather enigmatic sentence refers to the end of *Metaph.* VII (Z) 9 (ποιὸν δ' ἢ ποσὸν οὐκ ἀνάγκη ἀλλ' ἢ δυνάμει μόνον (*scil.* δεῖ προυπάρχειν) and Aristotle's subsequent considerations of the relationship between the parts of the definition or formula (λόγος) on the one hand and the parts of the *definiendum* on the other hand (*Metaph.* VII [Z] 10). Aristotle explains there that "if the parts are prior to the whole, and the acute angle is a part of the right angle and the finger a part of the animal, the acute angle will be prior to the right angle and the finger to the man. But the latter are thought to be prior; for in formula the parts are explained by reference to them, and in virtue also of their power of existing apart from the parts the wholes are prior. Perhaps we should rather say that 'part' is used in several senses. One of these is 'that which measures another thing in respect of quantity'" (1034 b 28–33, transl. W. D. Ross). Relating this consideration to what has been said at the end of *Metaph.* VII (Z) 9 on the potential pre-existence of quality and quantity, Ibn Rushd explains in his *Long Commentary on the Metaphysics* (p. 893, l. 16–19): "This problem [i.e., whether the definition of the whole contains that of the parts] can also be solved by saying that 'parts' is predicated in two ways, [namely] of qualitative parts and of quantitative parts. The definition of quantitative parts is posterior to the definition of the whole and to the whole [itself]. The

definition of qualitative parts, on the other hand, is prior to the definition of the whole and to the whole [itself]."

In *Metaph.* VII (Z) 10, 1035 b 3sqq., Aristotle applies his above distinction to the definition. Like the whole and its parts, the definition can be analysed and divided into parts prior and posterior to the definition. That which is posterior is part of it only with respect to its matter, such as the acute angle which is with respect to 'matter' or spatial divisibility part of the right angle, yet not with respect to its formula (the definition of right angle is presupposed by the definition of acute angle). Such posterior parts Ibn Rushd calls, according to his distinction between quantitative and qualitative parts, 'parts in terms of quantity' *(ajzāʾ allatī min qibali l-kammiyya)* (cf. *Long Commentary on the Metaphysics*, p. 905, l. 15, p. 908, l. 7–17, p. 909, l. 10sq., p. 910, l. 3–5, etc.). The parts which are prior, on the other hand, are "those which are parts of the formula and of the substance according to its formula" (transl. W. D. Ross). Applied to the example of the soul, this means that "the parts of the soul are prior, either all or some of them, to the concrete animal, and *similarly in each single case* (καὶ καθ' ἕκαστον δὴ ὁμοίως)», *Metaph.* VII (Z) 10, 1035 b 18–20. The last part of this section is crucial for Ibn Rushd's interpretation. In the Arabic translation he used, it has been interpreted not as referring to 'each case of a concrete whole', but rather as referring to 'all particulars' *(wa-kadhālika fī jamīʿi l-juzʾiyyāt*, cf. *Long Commentary*, p. 903, l. 11, p. 909, l. 6). Thus the Aristotelian distinction between substance *qua* formula and concrete whole was shifted into the distinction between 'parts of the whole' and 'particulars', which meant that the parts of the whole were described as being prior in the definition to the particulars (*ajzāʾ al-kulli hiya mutaqaddimatun fī l-ḥaddi ʿalā l-juzʾiyyāt*, *ibid.*, p. 909, l. 6–8). As a consequence, the parts of the whole must be related to the particulars as the 'parts in terms of quality' to the 'parts in terms of quantity'. What is more, since 'parts of the whole' obviously include form and matter in the case of material things (cf. *Metaph.* 1035 a 25–27), the term 'parts in terms of quality' has to include matter as part of the whole prior in definition.

Ibn Rushd comments on the Arabic translation of *Metaph.* VII (Z) 10, 1035 b 18–20: "[Aristotle] says all this because this is how the right angle is related to the acute angle and the circle to its sections, and in general the genera to the parts in terms of quantity. In this respect, this [relation] seems to be the same as [that] between the parts in terms of

quality and the parts in terms of quantity in so far as the quality is prior in the same way as the form is prior, the parts are prior *qua* priority of the matter, and the priority of the whole with respect to the part belongs to the priority of the form," *Long Commentary on the Metaphysics*, p. 909, l. 9–14. To sum up, both parts in terms of quantity and parts in terms of quality are, according to *Metaph.* VII (Z) 9, 1034 b 19, potential parts of the whole. Parts in terms of quantity are posterior to the formula of the whole and to the whole (cf. also *Long Commentary on the Metaphysics*, p. 908, l. 10–18) and comprise material and quantitative particulars. Parts in terms of quality are prior to the formula of the whole and to the whole itself and comprise, at least in cases of material substances, form and matter.

[112] Ibn Rushd calls 'real potentiality' *(quwwa ḥaqīqiyya)* the state of being not necessarily false or impossible; cf. *Metaph.* V (Δ) 12, 1019 b 30 sqq. (τὸ μὲν οὖν δυνατόν [...] τὸ μὴ ἐξ ἀνάγκης ψεῦδος σημαίνει, also *Metaph.* IX [Θ] 3, 1047 a 24 sq., 7, 1049 a 13 sq.) and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 590–593.

[113] Cf. *Metaph.* VIII (H) 6, 1045 b 20 sq.

[114] Cf. *Metaph.* IX (Θ) 10, 1051 a 34 – b 1, XIV (N) 2, 1089 a 26 sq. and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1220.

[115] *ʿAdam* and *maʿdūm* in this sentence do not mean 'privation' as translated by Quirós (p. 47), Horten (p. 30), and Van den Bergh (p. 22), but rather (τὸ) μὴ ὂν (non-being). For the equation of that which is potentially and non-being cf. *Metaph.* XII (Λ) 2, 1069 b 18–20, 26–28.

[116] Cf. *Metaph.* V (Δ) 12, 1019 b 15 sq., IX (Θ) 1, 1046 a 29–34.

[117] I.e., 'is not commensurable in square with...' (δυνάμει ἀσύμμετρα), cf. above, p. 44 of the translation and note 108.

[118] In the first case, the contrary is necessarily true, in the second case, the contrary is not necessarily false; cf. *Metaph.* V (Δ) 12, 1019 b 23–33.

[119] Cf. *Metaph.* V (Δ) 16, 1021 b 12 sq. The same example is given in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 623, as well as in his Epitome of *De caelo*, cf. Ibn Rushd, *Risālat al-samāʾ wa-l-ʿālam*, p. 25, l. 15 – p. 26, l. 4.

[120] Cf. *Metaph.* V (Δ) 6, 1016 b 16sq.

[121] Cf. Aristotle, *De caelo* II 4, 286 b 20sq.

[122] The same examples are given in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 623, l. 14 – p. 624, l. 2.

[123] Aristotle mentions this Pythagorean conception of 'three' in *De caelo* I 1, 268 a 9sqq., but never calls 'three' 'complete'. The three as complete number is discussed in the context of the notion 'complete' by Ibn Sīnā, *K. al-Shifāʾ: Ilāhiyyāt* III.4, p. 187sq. In his *Long Commentary on the Metaphysics*, Ibn Rushd omits this example.

[124] Cf. *Metaph.* V (Δ) 16, 1021 b 15–17.

[125] Cf. *Metaph.* V (Δ) 16, 1021 b 17–20. *Kadhdhāb* ('swindler') is what Ibn Rushd found in his translation for συκοφάντης ('sycophant'); cf. *Long Commentary on the Metaphysics*, p. 621, l. 15sq., p. 624, l. 11–15.

[126] I.e., attainment of perfection is what makes such a thing complete, this perfection being in itself good; cf. *Metaph.* V (Δ) 16, 1021 b 23–25. The translations by Horten (p. 31sq.) and Van den Bergh (p. 23) do not hit the point.

[127] This is Ibn Rushd's interpretation of *Metaph.* V (Δ) 16, 1021 b 30 – 1022 a 1. The notion of that which possesses its end *qua* good in itself and by itself, as described in 1021 b 23–25, is most eminently predicated of God. This is what Aristotle refers to by τὸ εὖ μηδὲν ἐλλείπειν μηδ' ἔχειν ὑπερβολήν, 1021 b 31sq.; and it is not only the most complete inasmuch as it has its end or final cause in and by itself, but also because it is the final cause for the perfection of anything else. Cf. also Ibn Rushd, *Long Commentary on the Metaphysics*, p. 626, l. 13 – p. 627, l. 4.

[128] Cf. *Metaph.* V (Δ) 16, 1022 a 1–3.

[129] Due to the Arabic translation of the *Metaphysics*, which misrepresents the syntax of Aristotle's wording, Ibn Rushd merges Aristotle's distinction between the first two types of 'whole' into one single definition. According to Aristotle 'whole' means (i) that from which none of its parts is lacking, and (ii) that which contains its parts or contents in such a way that they form a unity; cf. *Metaph.* V (Δ) 26,

1023 b 26–28. As a consequence, Ibn Rushd is unaware of Aristotle's subdivision of the second type of 'whole' (1023 b 28–36) and subsumes all Aristotle says there under the concept of the continuous (cf. 1023 b 33).

[130] I.e., that outside which it is not possible to find anything of its parts. Such a synonymy is not mentioned by Aristotle. It is to be found, however, in Ibn Sīnā, *K. al-Shifāʾ: Ilāhiyyāt* III.4, p. 189, l. 15–18.

[131] Cf. *Metaph.* V (Δ) 26, 1023 b 33sq.

[132] Cf. *Metaph.* V (Δ) 26, 1024 a 1–10; also Ibn Sīnā, *K. al-Shifāʾ: Ilāhiyyāt* III.4, p. 190, l. 1–4.

[133] This first type of 'part' and its two subcategories correspond to the first of altogether four types of 'part' described by Aristotle, *Metaph.* V (Δ) 25, 1023 b 12–17.

[134] This division of the second subcategory of the quantitative meaning of 'part' is not found in the *Metaphysics*, nor in Ibn Rushd's *Long Commentary on the Metaphysics*. The distinction between part in actuality and part in potentiality may be borrowed from Ibn Sīnā, *K. al-Shifāʾ: Ilāhiyyāt* III.4, p. 190, l. 8sq.

[135] Ibn Rushd omits Aristotle's second type of 'part' (part of genus or species, *Metaph.* V (Δ) 25, 1023 b 17–19), and merges the following two Aristotelian classes of 'part' into one another. For a more detailed view on Aristotle's division cf. his *Long Commentary on the Metaphysics*, p. 664–666.

[136] 'Deficient' *(nāqiṣ)* is the term Ibn Rushd found in his Arabic version of the *Metaphysics* as translation of (τὸ) κολοβόν ('mutilated'), *Metaph.* V (Δ) 27.

[137] In *Metaph.* V (Δ) 27, number is explicitly excluded from the class of things to which the term 'mutilated' might be applied. In his *Long Commentary on the Metaphysics* (p. 674, l. 19 – p. 675, l. 3), Ibn Rushd corrects the present error.

[138] This thought is absolutely un-Aristotelian. First, according to Aristotle it is not the genus, but rather the essence (οὐσία) which must remain the same and complete, in order to speak appropriately of deficiency (or mutilation). Aristotle gives the example of a cup which

by its essence remains a cup, even if a part of it is broken off; *Metaph.* V (Δ) 27, 1024 a 15sq., 24sq. Secondly, Aristotle applies the concept 'mutilated' exclusively to that which is an individual 'whole' (cf. *Metaph.* V [Δ] 27, 1024 a 12), whereas Ibn Rushd transfers it to the entirety of existents *(sāʾir al-mawjūdāt)* as compared to the 'first principle' *(al-mabdaʾ al-awwal)* or God. Since according to what has been said before, the genus of that which is deficient has to remain complete, this presupposes (a) a concept of being *qua* genus of all existents, which is hardly consistent with what has been said about the analogical predication of being, and (b) something in respect to which the deficiency in question occurs and which is found in God, yet different from this genus which has to remain complete. In other words, it seems to require a concept like the Neoplatonic-Avicennian notion of 'that which is above perfection' (on which see R. Wisnovsky, *Avicenna's Metaphysics in Context*, p. 185–195; as well as P. Adamson, *The Arabic Plotinus*, p. 119–124, 217sq., for its origins in the Arabic Plotinus).

[139] Cf. *Metaph.* V (Δ) 27, 1024 a 16–24, and Ibn Rushd, *Long Commentary on the Metaphysics*, p. 676, l. 3 – p. 677, l. 10.

[140] This mode of predication is not explicitly mentioned by Aristotle, but corresponds with what Aristotle says about the 'whole', *Metaph.* V (Δ) 26, 1023 b 35.

[141] Aristotle distinguishes in *Categories* 12 between five meanings of 'prior' and 'posterior': (i) in time, (ii) what does not reciprocate with respect to existence, (iii) with respect to the order in knowledge, (iv) better (prior) or worse (posterior) by nature; and (v) priority of the cause in that which reciprocates with respect to existence. In *Metaph.* V (Δ) 11, he distinguishes between four meanings of 'prior' and 'posterior': (a) that which is nearer some beginning, either absolutely or relatively, (b) 'prior' and 'posterior' in knowledge, (c) priority of attributes of things which are themselves prior, and (d) 'prior' and 'posterior' with respect to nature and substance. In the present section, Ibn Rushd follows Aristotle's division in the *Categories*. The first type he mentions answers to (i) in the *Categories*, the second one corresponds roughly with (iii), the third one with (iv), the fourth one with (ii), and the fifth one with (v) in the *Categories*. As in his *Middle Commentary on the Categories* he calls that which does not reciprocate with respect to existence ([ii] in the *Categories*, type [4] in the Epitome) 'that which

is prior by nature' (cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 111, l. 5 sqq.). There is, however, a certain discrepancy between type [iii] of the *Categories* and the *Middle Commentary on the Categories* and the related type [2] in the Epitome. In both texts, Ibn Rushd calls this type 'prior with respect to the order' (corresponding to πρότερον κατά τινα τάξιν, *Cat.* 14 a 34). Yet while his comments on this type of priority in the *Middle Commentary on the Categories* are in accordance with Aristotle's classification in the *Categories*, Ibn Rushd conflates it here in the Epitome with type (a) of *Metaph.* V (Δ) 11, described there, among other things, as that which is prior with respect to a certain first or beginning (τινὸς πρώτου καὶ ἀρχῆς, rendered here by *fī mabdaʾin maḥdūdin*), e.g. in place (πού). Due to this confusion, this type of priority no longer corresponds to what Aristotle adduces in the *Categories* as an example for that which is 'prior with respect to the order', namely the prior in knowledge (*Cat.* 14 a 36), which is mentioned in *Metaph.* V (Δ) 11 as a separate class of priority (type [b]). As a consequence, Ibn Rushd lists in the Epitome a sixth type of priority which answers to type (b) of *Metaph.* V (Δ) 11 and integrates this neglected aspect of type (iii) of the *Categories*.

[142] Cf. *Categories* 12, 14 a 36: "καὶ τῶν λόγων."

[143] *Al-sabab ... al-ʿilla*, translated here through different words, in order to catch at least approximately the meaning of the Arabic sentence. Both terms are used in Graeco-Arabic translations and medieval Arabic philosophy synonymously in the sense of what Aristotle calls (τὸ) αἴτιον or αἰτία (cf. M. Ullmann, *WGAÜ*, p. 84, *WGAÜ* Suppl., p. 78, for the *Metaphysics* cf. Ibn Rushd, *Long Commentary on the Metaphysics*, vol. III, 'Index C,*a*', p. 59, 67 sq.). In order to prevent misunderstandings, both terms are rendered by 'cause' in the remaining part of the Epitome.

[144] Cf. *Metaph.* V (Δ) 2, 1013 a 24 – b 3.

[145] Cf. *Metaph.* V (Δ) 2, 1014 a 10–20.

[146] For the externality of the final cause with respect to that which is changed or set in motion by this cause, cf. Aristotle, *Physics* II 5, 196 a 33 – 197 b 2; for the externality of the efficient cause, cf. *Metaph.* XII (Λ) 4, 1070 b 22. A systematic distinction between internal and external causes is found in Ibn Sīnā, *K. al-Shifāʾ: Ilāhiyyāt* VI.1, p. 258, l. 1–8.

[147] Cf. *Metaph.* I (A) 6, 988 a 2–4; V (Δ) 4, 1015 a 3–10; IX (Θ) 8, 1050 a 13–15.

[148] In the case of the mutual change of the four simple elements into one another something must remain, because that which results from this change is not generated from nothing. Obviously, that which remains cannot be the matter of the element as this is what changes. Thus, there must be some intermediate or transitory form which remains the same in this process of change. Cf. Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, ed. H. Eichner, p. 25–28, ad *De gen. et corr.* 318 b 12 – 319 b 5.

[149] Such homeomeric parts are flesh and bone, the form of which is the nutritive soul, because food is transformed into flesh, bone, and blood. Contrary to the anomeomeric organs or limbs (pace Van den Bergh, p. 172), these homeomeric parts keep their form even when the form of that which they are parts of changes (the dead body is still called 'flesh and bones' rather than 'having a hand' or 'having legs', cf. Aristotle, *De gen. et corr.* 321 b 28–31) because the change which has occurred concerns only their matter, not their form (cf. Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 42sq.).

[150] Cf. Ibn Rushd, *Talkhīṣ [Epitome] Kitāb al-nafs* , p. 9–11, 73sq. (ed. al-Ahwānī), *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 41–43, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 22–26.

[151] The essence or form of that which is mixed is for its qualities to be in a single intermediate state between the different or opposite qualities of the two or more things mixed together. This form cannot emerge without a corresponding quantitative form of the material substrate, which has to be one and the same for the mixed *qua* mixed and for the ingredients involved in this mixture. As long as the quantitative form of that which is mixed is different from those of the ingredients, there cannot emerge true mixture with one qualitative form of all ingredients, but only some sort of composition in which some qualities of the one ingredient are adopted through the other. Cf. Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 78–84 on mixture, and Aristotle, *De gen. et corr.* I 10.

[152] Cf. *Metaph.* V (Δ) 1, 1013 a 16sq.

[153] Cf. *Metaph.* V (Δ) 1, 1012 b 34 – 1013 a 1.

[154] Cf. *Metaph.* V (Δ) 1, 1013 a 1–4.

[155] Cf. *Metaph.* V (Δ) 1, 1013 a 14–16. In addition to the three types of principle mentioned here, Aristotle lists the following three types: (i) the part of a thing from which its genesis starts, (ii) the external starting point of genesis, movement or change, and (iii) that which moves something else by will; cf. *ibid.* 1013 a 4–14. According to Ibn Rushd, all these meanings of 'principle' are analogically related to the other three types mentioned by Aristotle: (a) cause, (b) starting point of movement, and (c) the best starting point of coming to be, where (a) seems to correlate with (ii), (b) with (iii), and (c) with (i).

[156] Cf. *Metaph.* V (Δ) 3, 1014 a 26–35.

[157] Cf. *Metaph.* V (Δ) 3, 1014 b 3–6.

[158] Cf. *Metaph.* V (Δ) 3, 1014 b 6–12.

[159] The first part of this sentence is an almost literal quotation of the Arabic translation of *Metaph.* V (Δ) 5, 1015 a 20 (cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 515, l. 9). The second part is Ibn Rushd's interpretation of ὡς συναιτίου ('as a joint cause'; 1015 a 21), which seems to be correct in view of the following example. Furthermore, Aristotle himself calls matter a 'joint cause' in *Physics* I 9, 192 a 13, and similarly in *De anima* II 4, 416 a 14. However, in his *Long Commentary* on this passage, Ibn Rushd skips this note.

[160] Cf. *Metaph.* V (Δ) 5, 1015 a 26–30.

[161] Cf. *Metaph.* V (Δ) 5, 1015 a 33–35.

[162] Of the four types of necessity mentioned by Aristotle, Ibn Rushd omits here the 'necessary' without which the good cannot be or come to be; cf. *Metaph.* V (Δ) 5, 1015 a 22–26, and Ibn Rushd, *Long Commentary on the Metaphysics*, p. 517, l. 13 – p. 518, l. 7.

[163] Cf. *Metaph.* V (Δ) 4, 1015 a 7–13.

[164] Cf. Aristotle, *De anima* III 10–11, especially 434 a 11–16.

[165] Cf. *Metaph.* V (Δ) 4, 1014 b 32–35.

[166] Ibn Rushd applies the term 'essential predicates' *(maḥmūlāt dhātiyya)* to what Aristotle calls καθ' αὐτὰ λεγόμενα, *Posterior Analytics* I 4. In his commentaries on this section of *Posterior Analytics* he distinguishes between four kinds of essential predicates: (i) predicates employed in the definition of the subject of predication, that is either genus or differentia specifica, or both together (cf. *An. post.* I 4, 73 a 34–37, Ibn Rushd, *Sharḥ al-Burhān*, p. 219). (ii) That which is predicated essentially of a thing which itself is employed in the definition of this predicate (as rectilinearity which is predicated of line [yet not part of the definition of line], while line itself serves as genus in the definition of rectilinearity). This type of essential predicate is predicated of essential accidents only (cf. *An. post.* I 4, 73 a 37 – b 3, Ibn Rushd, *Sharḥ al-Burhān*, p. 220sq.). (iii) A predicate employed in the definition of the subject of predication, which in turn is employed in the definition of this predicate. This mode of predication is not used in absolute proofs, but only in *demonstrationes quia* and *propter quid* (cf. *An. post.* I 4, 73 b 16–24, Ibn Rushd, *Sharḥ al-Burhān*, p. 223, p. 226sq.). (iv) Predicates which are employed in the definition of the subject of predication because the latter stands in an essential causal relation to the predicate (as with death and sacrifice). This mode of predication is likewise employed in *demonstrationes quia* and *propter quid* only (cf. *An. post.* I 4, 73 b 10–16, Ibn Rushd, *Sharḥ al-Burhān*, p. 225sq.; for a summary of this fourfold distinction cf. Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 381sq.). The present statement in the Epitome concerns types (i) and (ii) of this classification. On 'essential predicates' cf. also *Long Commentary on the Metaphysics*, p. 307, l. 14 – p. 308, l. 8, p. 785–788.

[167] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 302sq., on *Metaph.* IV (Γ) 2, 1003 a 33sqq.

[168] Cf. Aristotle, *Physics* I 2–3 on Melissus and Parmenides; also Ibn Rushd's *Long Commentary on the Metaphysics*, p. 760, l. 4–10, on *Metaph.* VII (Z) 1, 1028 b 4sq.

[169] I.e., in the lost fifth chapter of the Epitome; cf. note 23.

[170] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 302–304, and *Metaph.* IV (Γ) 2, 1003 a 33 – b 3.

[171] Cf. p. 25 of the translation.

[172] The same focus on the categories and their causal relations is displayed in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 305 sq. on *Metaph.* IV (Γ) 2, 1003 b 5–10. That which 'constitutes' the remaining nine categories is there determined as the category of substance, which is constitutive not *qua* efficient or final cause, but rather *qua* substrate *(mawḍūʿ)*.

[173] According to Ibn Rushd's *Long Commentary on the Metaphysics*, p. 315, l. 17 – p. 316, l. 7, the inquiry about the general concomitants *(al-lawāḥiq al-ʿāmma)* of being *qua* being is the task of metaphysics referred to by Aristotle in *Metaph.* IV (Γ) 2, 1003 b 34–36. In his Prooemium to *Metaph.* XII (Λ), which is presumably at least partly indebted to the commentary by Alexander of Aphrodisias, Ibn Rushd explains that this task is accomplished in *Metaph.* IX (Θ) and X (I): "Having ascertained in these two books the principles of the sensible substance subject to generation and corruption, he thinks it necessary to begin after that an inquiry about the general concomitants of being *qua* being. He inquires first about potentiality and actuality and their relation to the first principles in them. He shows that actuality precedes potentiality, and this is the book designated by the letter *Ḥāʾ*, which follows *Zāy*. Then he inquires, in the following book called by the letter *Ṭāʾ*, about the one and the many, the individual, the similar, the contrary and other general concomitants of being *qua* being.", *Long Commentary on the Metaphysics*, p. 1403, l. 11–18, transl. C. Genequand (slightly modified). For the confusion displayed in this section with respect to the designation of the Aristotelian treatises cf. M. Bouyges, *Notice*, p. cliii sq.

[174] To be treated in Chapter IV of the Epitome; cf. above, p. 25 sq. of the translation.

[175] *Muṣādara* ('postulate') is the translation of αἴτημα Ibn Rushd found in his Arabic version of the *Posterior Analytics*. For *aṣl mawḍūʿ* ('supposition') cf. above, note 13. The present section on the types of proofs employed in metaphysics refers to the preceding consideration of the major task of metaphysics, i.e. the investigation of how all kinds of being *qua* being are related to that which is constitutive and being in a primary sense, i.e., substance. In order to understand what Ibn Rushd means here by 'logical proofs' and his subsequent explanation (certain-

ly not deductive or apodictic proofs, as suggested by Van den Bergh, p. 175), we have to take into consideration that according to Ibn Rushd this task is primarily accomplished in *Metaph.* VII (Z). At the beginning of this book, Aristotle explains: "There are several senses in which a thing may be said to be, as we pointed out previously in our book on the various senses of words; for in one sense it means 'what a thing is' or a 'this', and in another sense it means that a thing is of a certain quality or quantity or has some such predicate asserted of it. While 'being' has all these *senses*, obviously that which *is primarily* is the 'what', which indicates the substance of the thing," 1028 a 10–15, transl. W. D. Ross (emphasis added). In this section, Aristotle transfers the results of his analysis of the categories of predication (presented in the *Categories* and *Metaph.* V [Δ]) to a categorization of beings. The 'first substance' of the *Categories*, the ultimate subject of all possible predications, corresponds here with the τόδε τι or individual existent, the 'second substance' *qua* subject of universal quidditative predication with the τί ἐστι or quiddity, i.e., that 'part' of a thing which most truly *is*. Aristotle's argument is thus based on the application of his logical study of meanings of predicates to his ontological study on being as such.

In light of this, Ibn Rushd supplies at the end of his Long Commentary on the passage in question a note which parallels the present section of the Epitome: "One should know that this argument is a logical one, and that most of the demonstrations [employed] in this science are logical demonstrations. By [the term] 'logical' I mean here premises adopted from the discipline of logic. This is due to [the fact] that the discipline of logic can be employed in two [different] ways, [i.e., either] as instrument and rule employed in other [disciplines], but also [in such a way that] that which has been proved in it is [itself] employed in another science, similar to the way what is proved in one theoretical science is used in another science," *Long Commentary on the Metaphysics*, p. 749, l. 1–5. The systematic foundation of this concept of 'logical demonstration' and 'logical premises' has to be sought in Ibn Rushd's analysis of the *Posterior Analytics*. In book I, ch. 22, of this work Aristotle seeks to prove that the things predicated of what something is are finite. His first, universal, proof ends with a conclusion closely related to the beginning of *Metaph.* VII (Z): "Neither upwards, therefore, nor downwards will one thing be said to belong to one thing. For the things of which the accidentals are said are whatever is in

the substance of each thing; and these are not infinitely many. And upwards there are both these and their accidentals, and neither are infinitely many. It is necessary, therefore, for there to be something of which something is predicated primitively, and something else of that; and for this to come to a stop, and for there to be something which is no longer predicated of anything prior and of which nothing else prior is predicated. Now this is one way of demonstration," *An. post.* I 22, 83 b 25–32, transl. J. Barnes.

In the Arabic translation used by Ibn Rushd, the last sentence of this section is rendered as follows: "Now this is one of the ways [of demonstration] which displays the character of logical syllogistics," *Sharḥ al-Burhān*, p. 460. This translation anticipates a remark by Aristotle few lines below (84 a 7), which characterizes the preceding mode of demonstration as λογικῶς as opposed to the subsequent proof which is described as ἀναλυτικῶς. On the basis of this terminology, Ibn Rushd distinguishes between 'logical syllogistics' *(al-qiyās al-manṭiqī)* and what he calls in accordance with the translation of *An. post.* 'demonstrative syllogistics' *(al-qiyās al-burhānī)*, i.e., analytical demonstration. 'Logical syllogistics' is described as follows: "It is evident that [Aristotle] means by 'logical syllogistics' the proof which is based on true and non-specific *(ghayr munāsiba)* premises. [...] 'Logical proof' is predicated of a true syllogism based on general non-essential things. [...] We speak also of 'logical syllogistics' when the premises of the [syllogism] are adopted from the discipline of logic; for the discipline of logic is employed in two [different] ways, as stated elsewhere, [i.e.] either as instrument (this is the specific [mode of] employment), or inasmuch as it is one of the sciences, that is, [in so far as] that which has been proved in it can be employed in another science," *Sharḥ al-Burhān*, p. 461, for similar definitions cf. *ibid.*, p. 445, *Talkhīṣ Kitāb al-burhān*, p. 429 sq. What makes the 'logical proof' suitable for other demonstrative sciences is the fact that it is based on non-specific premises. The distinction between specific and non-specific premises draws on *An. post.* I 12, where Aristotle explains that appropriate questions of a science are only those which lead to proofs about the subject genus proper of this science based on premises specific to this science (προτάσεις ... καθ' ἑκάστην ἐπιστήμην). Such premises are called in the Arabic translation of *An. post.* and in Ibn Rushd's commentaries *muqaddimāt munāsiba* or *muqaddimāt khāṣṣa*, 'proper' or 'specific premises' (cf. Ibn Rushd, *Sharḥ al-Burhān*, p. 190, 309, 328–330, *Talkhīṣ Kitāb al-burhān*, p. 389, 394, 399).

According to *An. post.* I 7, one cannot establish true scientific proofs on the basis of non-specific premises. Thus, if 'logical proofs' are not only suitable for metaphysics, but even constitute the majority of metaphysical proofs, as maintained by Ibn Rushd in the Epitome as well as in his *Long Commentary on the Metaphysics*, the 'logical' premises employed in metaphysics must have a certain property which qualifies them as premises proper of metaphysics. In Ibn Rushd's view this property consists in the fact that that which is stated in such premises is found in being as such *(hiya mawjūda li-mawjūd muṭlaq)*, the subject matter proper of metaphysics. In other words, it must comply with the two major conditions of scientific proof unfolded in *An. post.* I 10, namely (a) that that about which a science proves properly is assumed to exist, and (b) that bearing on the subject genus of the science is a sufficient condition for the premises employed in true proofs of this science. Thus, Ibn Rushd states in his *Long Commentary on the Metaphysics*, p. 749, l. 6–9: "Therefore, these ['logical premises'] can be employed in this science [of metaphysics] as a sort of proper premises *(qarīb min al-muqaddimāt al-munāsiba)* since this science [of metaphysics] considers being as such and [that which is stated in] the 'logical premises', such as definitions, descriptions and whatever else is stated by them, is found in being as such." Judging from the context of these related notes in the Epitome and in the *Long Commentary on the Metaphysics* (as also in the *Long Commentary on the Posterior Analytics*), it is predominantly or exclusively the doctrine of substance proffered in the *Categories* that Ibn Rushd has in mind. As a general rule, he disqualifies the adoption of non-specific logical premises (called *naẓar manṭiqī*, 'logical consideration') in metaphysics as a dialectical form of argumentation, because such premises cannot be employed as quasi-proper premises; cf. *Long Commentary on the Metaphysics*, p. 1417, l. 17 – p. 1418, l. 10.

[176] The expression *alladhī yuqālu fī mawḍūʿin* ('what is called in-a-substrate') has to be kept apart from the expression *alladhī yuqālu ʿalā mawḍūʿin* ('what is predicated of a substrate'). Ibn Rushd uses it in his Commentary on the *Categories* as an equivalent or definition of accident (corresponding with the Aristotelian expression τὸ ἐν ὑποκειμένῳ), cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 15, l. 8, p. 19, l. 3 sq., p. 27, l. 10 sq.

[177] On the modes of universal and particular predication of 'substance' and 'accident' cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 7–10.

[178] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 637 sq., 651–654; *Talkhīṣ Kitāb al-maqūlāt*, p. 53, 80, 90, 121 sq.

[179] Cf. Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 45; *Metaph.* V (Δ) 21, 1022 b 18 sq.

[180] This remark draws presumably on *Cat.* 8, 9 a 28 – b 9, Aristotle's theory of 'affective qualities' which cause accidental changes in the senses. An explicit equation of affective qualities and accidents occurs in the Arabic translation of *Cat.* 8, 9 b 19, where τῶν τοιούτων συμπτωμάτων is rendered by *hādhihi l-ʿawāriḍ*, cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 77.

[181] Qualities are differentiae of essences and as such inseparable, cf. *Metaph.* V (Δ) 14, 1020 a 20 – b2, XI (K) 6, 1062 a 26–28, *Talkhīṣ Kitāb al-maqūlāt*, p. 81, l. 2–7. The present sentence must not be mistaken as denying the existence of immaterial qualities. There are of course immaterial qualities such as virtue or badness. However, these are affections of movable physical subjects, cf. *Metaph.* V (Δ) 14, 1020 b 17–20.

[182] The argument draws on the classification of qualities as provided in *Cat.* 8 (which is different from the classification in *Metaph.* V [Δ] 14). *Istiʿdād* stands here for φυσικὴ δύναμις (*Cat.* 8, 9 a 14–28) referred to in Ibn Rushd's *Talkhīṣ Kitāb al-maqūlāt* by *quwwa ṭabīʿiyya*.

[183] Cf. *Metaph.* V (Δ) 13, 1020 a 11–14, *Long Commentary on the Metaphysics*, p. 596 ad loc.

[184] Ibn Rushd clearly refers to the doctrines that numbers and the other objects of mathematics are either separate immaterial substances or Ideas, ascribed by Aristotle to Plato, Platonists and Pythagoreans and discussed in *Metaph.* XIII (M); cf. also his *Long Commentary on the Metaphysics*, p. 763–765 ad *Metaph.* VII (Z) 2, 1028 b 15–27. Ibn Rushd follows Aristotle in distinguishing between incidental and essential quantities. The latter are again subdivided into substantial quantities (such as line) and accidental quantities which are called 'essential' in so far as they are accidents of such substantial quantities (such as long, short, etc.), cf. *Metaph.* V (Δ) 13, 1020 a 17–23, Ibn Rushd, *Long Commentary on the Metaphysics*, p. 597 sq. It goes without saying that substantial qualities in Aristotle's and Ibn Rushd's view are not themselves substances, but can only be separated in thought. In

his *Long Commentary* on *Metaph.* V (Δ) 7, 1017 b 6 sq., where Aristotle calls the half line substance, Ibn Rushd respectfully avoids any comments.

[185] This section is quite difficult due to its conciseness. The translations provided by Horten (p. 44 sq.), Quirós (p. 63) and Van den Bergh (p. 31 sq.) go far astray due to misinterpretations of various personal pronouns. Ibn Rushd's argument goes as follows: Definitions of corporeal substances which use the concept of three-dimensional extension as a sort of genus do not supply any information about the essence of these substances, because the subject of predication in such (pseudo-)definitions (hence, called 'description' *waṣf*) is not the essence of the individual, but rather its material substrate, of which certain accidents are predicated. True definitions must state the essences or formal causes of the definiendum, i.e. something which is prior not only to the concrete compound substance but also to its material substrate. Hence, three-dimensional extension is nothing more than properties of the undetermined material substrate, but neither first nor second substances.

The point of reference is the important chapter 3 of *Metaph.* VII (Z) which discusses substance *qua* substrate, essence, universal, and genus. In the passage 1029 a 12–19, Aristotle considers the relation of matter and the three dimensions to essence and shows that the three dimensions are quantitative properties of matter, not of the essence of the compound substance. In the *Long Commentary on the Metaphysics* (p. 774 sq.), Ibn Rushd comments upon this passage as follows: "Then he says: 'Furthermore, length, breadth, and depth are quantities and not substances; for a quantity is not a substance.' He means: Furthermore, it is evident with respect to length, breadth, and depth, which are thought to be the substance *(jawhar)* of body, that they are quantities and that quantity is not a substance. That is to say that supposing we accept that bodies are substances and that length, breadth, and depth, by which body is determined, are quantities and not substances, nothing remains in body to be called substance but matter. For if this is not substance with three dimensions, which are thought to be closer to substantiality than other [things] due to the fact that if they are taken away from body, all remaining [properties of body] are [also] taken away (hence, body must be substance through matter), then the individual substance must be substance through something [else] in it

which is [its] substance or otherwise [dispersed] in all its parts. Then he says: 'But the substance is that to which exactly these things belong primarily'. He means: If these things [*i.e.* the three dimensions] which are found in matter are not substances, that in which they are found primarily and without intermediary must be substance *(jawhar)*, and this is matter. Then he says: 'But when length, breadth, and depth are taken away, we see nothing left except that there is a certain thing which is determined by these'. He means: When length, breadth, and depth, used in the definition of body, are taken away from it, nothing is left of body except that which is determined by length, breadth, and depth, and this is matter. [...] If body were substance and nothing else than matter and three dimensions, while the dimensions are not substances, it would be necessary that it is matter that makes body a substance. But then that which makes the substance a substance would itself be substance."

[186] The questions raised here draw on *Metaph.* VII (Z) 2, 1028 b 16–21: "Some think the limits of body, i.e. surface, line, point, and unit, are substances, and more so than body or the solid. Further, some do not think there is anything substantial besides sensible things, but other think there are eternal substances which are more in number and more real, e.g. Plato posited two kinds of substance—the Forms and the objects of mathematics—as well as a third kind, viz. the substance of sensible bodies" (transl. W. D. Ross); cf. also *ibid.* 1028 b 26–32. The reason why Ibn Rushd takes up these questions (which are closely related to the fourteenth aporia, *Metaph.* III [B] 5) at the present place are evident. They concern immediately what he has stated just before: [i] the posteriority of spatial extension to corporeal substantiality, and [ii] the major division of individual sensible substances into ensouled and natural substances. He postpones the solution for two reasons, firstly, for the methodological reason that sensible substance as such has to be investigated before addressing the question whether three-dimensional extension is posterior not only to ensouled but in general to all sensible substances. Secondly, because Aristotle himself deals in the following chapters of *Metaph.* VII (Z) only with the question whether there are eternal separate substances, and not with the question whether the three dimensions or mathematical solids constitute a principle of sensible substance (which is addressed in *Metaph.* XIII [M] 1–3 and XIV [N] 5). Ibn Rushd comes back to this question below, p. 89–94 of

the translation. Cf. also below, p. 58sq. of the translation, where he explains that the solution of this problem is a task not only for metaphysics but also, with a different methodical approach, for natural sciences. In the following section, he continues his explanation of the relation between substance and substratum, based up to this point on *Metaph.* VII (Z) 1–3, by taking into consideration the closely related question (already mentioned above) whether there are separate mathematical objects. In this context, he draws also on *Metaph.* XIII (M) missing (together with book XIV [N]) in the extant version of his *Long Commentary*.

[187] Aristotle distinguishes in *Metaph.* XIII (M) 1, 1076 a 32–36 between three different ways of claiming that mathematical objects exist in their own right: such objects exist either (A) in sensible things, or (B) separate from sensible things, or (C) in some other way. (A) is refuted, with a reference to τοῖς διαπορήμασιν (identified by Ross as *Metaph.* III [B] 2, 998 a 7–19), in *Metaph.* XIII (M) 2 with three arguments. Ibn Rushd, who obviously refers at the present place to (A), does not take up any of these arguments but introduces another argument said to be based on Aristotle's *Physics*. This argument seems to blur Aristotle's distinction between potential or indeterminate quantity and actual finite quantity, according to which it is indeterminate magnitude that cannot be detached from first matter, whereas it is actual limited magnitude that is bound to form or shape (cf. *Physics* III 6, 206 b 13–16, IV 2, 209 b 5–10).

[188] Cf. *Physics* IV 6–9, esp. IV 8, 216 b 3–10, IV 9, 216 b 30 sqq.; and Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 52sq.

[189] Cf. *Physics* IV 10–14, esp. IV 10, 218 b 6–9, IV 11, 219 b 13–16, IV 14, 223 b 18–24; also *De caelo* I 9, 279 a 16–18; and Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 57–62.

[190] Cf. *Physics* IV 11, 218 b 22 – 219 a 14; Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 96–101.

[191] Cf. *Cat.* 6, 4 b 23, *Physics* III 7, 207 b 7, *Metaph.* V (Δ) 13, 1020 a 13, XIII (M) 9, 1085 b 22. For the (Pythagorean) theory of numbers as units existing in sensible things, to which Ibn Rushd refers here, cf. *Metaph.* XIII (M) 6, 1080 b 1sq., b 16–18, 8, 1083 b 8–11.

[192] Cf. p. 35 of the translation.

[193] Cf. supra, p. 37sq. of the translation and notes ad loc.

[194] Cf. p. 112sq. and p. 118sq. of the translation.

[195] Cf. *Metaph.* XII (Λ) 4, 1070 b 7; *Physics* IV 14, 223 a 23–27.

[196] The present section refers to the second way (B) of ascribing separate existence to mathematical objects mentioned in *Metaph.* XIII (M) 1, 1076 a 32–36; cf. note 187. This view is ascribed to Plato and Speusippus by Aristotle (*Metaph.* VII [Z] 2, 1028 b 20sqq.), to the Pythagoreans by Ibn Rushd. Since this doctrine does not immediately concern the relation between substance and substrate, the overall topic of the present section of the Epitome, but rather the question, whether there are separate substantial principles of mathematics, Ibn Rushd announces that he will deal with it in the context of his investigation of the principles of the departmental sciences envisaged as the main topic of the lost fifth chapter of the Epitome.

[197] The argument is phrased carelessly. Obviously, what Ibn Rushd means is the fact that quantity is not a property of body by means of something else in which it exists prior to being attached to body, but rather the primary or fundamental property of bodily substance which together with matter constitutes body *qua* body. Cf. *Metaph.* VII (Z) 1029 a 15sq.: «[L]ength, breadth, and depth are quantities and not substances. For a quantity is not a substance; but the substance is rather that to which these belong primarily (πρώτῳ)», transl. W. D. Ross. Quantity is also prior to quality in numbers; cf. *Metaph.* XIII (M) 8, 1083 a 11. I see no need to adopt the variant reading *kayfiyya* ('quality') which raises even more problems for the interpretation.

[198] Cf. *Physics* IV 1–5 on body, space and place, also *Metaph.* XI (K) 10, 1067 a 30sq..

[199] Cf. *Cat.* 15, 15 b 16–25.

[200] According to Ibn Rushd's Long Commentary, this is the major task of book VII (Z) to be continued and completed in book VIII (H). In the preface to book VII (Z) he explains: "This book is the first in which [Aristotle] begins to investigate substance. Since there are separate substances and those which are inseparable, he divides his considerations on substance into two parts and investigates inseparable

substance in this and in the following book [VIII (H)]. [...] Then, in the book [entitled by] the letter *Lām*, he investigates separate substance and its mode of existence and its number," *Long Commentary on the Metaphysics*, p. 744, l. 8 – p. 745, l. 4. Similarly, Ibn Rushd comments on Aristotle's statement at the beginning of book IX (Θ) that substance has been dealt with previously: "He refers to book VII [Z] of this work in which he discussed the principles of the sensible substance," *ibid.*, p. 1183, l. 2 sq.; cf. also the section of Ibn Rushd's preface to book XII (Λ) quoted above, note 173. The relation of book VIII (H) to book VII (Z) is characterized by Ibn Rushd by two aspects. First it contains a recapitulation *(tadhkīr)* of the preceding book, and secondly it proffers a completion of what has been said there *(tatmīm al-qawl)*, cf. Ibn Rushd's preface to book VIII (H), *Long Commentary on the Metaphysics*, p. 1022. Unfortunately, the following text of this preface is lacunose (after *al-jawhar al-musammā*, p. 1022, l. 8, one has to assume an omission by homoioteleuton). However, it offers enough to recognize that for Ibn Rushd this 'completion' consists primarily in taking into consideration form and its relation to substance.

[201] This remark corresponds with Aristotle's epistemological note at the end of *Metaph.* VII (Z) 3 which justifies the treatment of sensible substance and its principles (in book VII [Z]) before turning to the discussion of separate insensible substance (in XII [Λ]). It is reiterated by Ibn Rushd in the relevant context of book XII (Λ), *Long Commentary on the Metaphysics*, p. 1559.

[202] Cf. p. 30 sq. of the translation.

[203] This section contains a rough summary of *Metaph.* VII (Z) 1–2, 1028 b 2–32.

[204] Cf. Aristotle, *Physics* II 1–3, *De caelo* III, 303 b 9 – 304 b 25.

[205] Cf. Aristotle, *De caelo* III, 299 a 2 – 300 a 19, 306 b 3 – 307 b 18.

[206] In this general form, Ibn Rushd's polemic does not hit the point. What Ibn Sīnā says in Book I, chapter 2, of the *Physics* of the *Kitāb al-Shifāʾ* is that there are two intrinsic principles of the body, matter and form, and two extrinsic principles, efficient and final cause. These four principles as well as the constitutive function of matter and form in the composite body are very well investigated in Ibn Sīnā's *Physics* (as

also in his metaphysics, *K. al-Shifāʾ: al-Ilāhiyyāt*, book II). The only task explicitly excluded from physics is the proof of the existence of these principles which is indeed depicted as lying in the responsibility of metaphysics, cf. *K. al-Shifāʾ: al-Ṭabīʿiyyāt I. al-Samāʿ al-ṭabīʿī*, p. 14, l. 10 – p. 16, l. 18. On Ibn Sīnā's views on body cf. also Abraham D. Stone, "Simplicius and Avicenna on the Essential Corporeity of Material Substances."

[207] This is how Ibn Rushd interprets the beginning of *Metaph.* VII (Z) 4: Ἐπεὶ δ' ἐν ἀρχῇ διειλόμεθα πόσοις ὁρίζομεν τὴν οὐσίαν, καὶ τούτων ἕν τι ἐδόκει εἶναι τὸ τί ἦν εἶναι, θεωρητέον περὶ αὐτοῦ, 1029 b 1 sq. As in his *Long Commentary on the Metaphysics* (p. 782, l. 6–10), περὶ αὐτοῦ is taken as referring to ὁρισμός (implied by πόσοις ὁρίζομεν) rather than to τὸ τί ἦν εἶναι.

[208] Cf. above, p. 34 of the translation, and notes 53–57; also *Metaph.* VII (Z) 10, 1034 b 24–32, 1035 b 11–13.

[209] Cf. *Metaph.* VII (Z) 6, esp. 1031 b 22–28.

[210] Cf. *Long Commentary on the Metaphysics*, p. 797, l. 5 – p. 799, l. 5 (ad *Metaph.* VII [Z] 4, 1030 a 10–14), p. 804, l. 4–8 (ad 1030 a 29–31), p. 808–810 (ad 1030 b 4–13), p. 814, l. 11 – 815, l. 14 (ad *Metaph.* VII [Z] 5, 1030 b 14–27).

[211] Cf. p. 60 sq. of the translation.

[212] The questions enumerated in this section correspond more or less with the topics of *Metaph.* VII (Z) 11, 1037 a 17–20, and chapters 12–13.

[213] Cf. *Metaph.* VII (Z) 4, 1030 b 4–7, and its Arabic translation, *Long Commentary on the Metaphysics*, p. 808, l. 8–11.

[214] According to *Metaph.* VII (Z) 5, all definitions of things other than substances must be ἐκ προσθέσεως, i.e. they must refer additionally to the substance to which such things belong. Substance in this type of improper definition is related to the definiendum in two ways; it either (A) does not essentially include the accident to be defined (as 'surface' or 'man' in the definition of 'whiteness'), or (B) includes the accident to be defined by its essence (as 'nose' in the definition of 'snub nose'). The latter type of accident is called *per se* attribute or συνδεδυασμένον. It cannot be defined without mentioning the subject with which it

forms, *qua* proprium, an essential union. Obviously, it is the relation of type (B) which Ibn Rushd calls here 'inclusion of the substance in actuality' *(bi-l-fiʿl)*, as is shown by the subsequent examples. Type (A), on the other hand, corresponds with Ibn Rushd's 'inclusion by proximate potentiality' only in so far as both apply to definitions of accidents which are not *per se* attributes.

It is not quite clear how this type is related to Ibn Rushd's subsequent distinction between (i) accidents signified by abstract nouns formed by root morphemes and (ii) accidents signified by paronymous denominations. This distinction seems to be rooted partly in Aristotle's considerations of paronymous names of qualities which in a way relate the relevant abstract denomination of a quality to the subject affected by the quality in question (as the predication of 'just', derived from justice, implies him who is qualified by justice) proffered in *Cat.* 8, 10 a 27 – b 11, partly in Aristotle's explanations on co-ordinate and inflected forms of words, presented in *Topica* II 9, as well as in his doctrine of proximate and remote potentiality. In his *Middle Commentary on the Topics* Ibn Rushd explains that co-ordinate forms of words (*naẓāʾir*, translating σύστοιχα) include (i) *mithālāt uwal* ('root words' or 'root morphemes') and (ii) derivative forms or paronymous words derived from this root morpheme, the latter signifying the connection of the former with a subject *(muqtarana bi-mawḍūʿin)*. Both have to be kept apart from inflected forms (*taṣārīf*, translating πτώσεις) which are likewise derived from root morphemes, yet signify the *mode* of existence of the predicate in the subject *(jihat wujūd al-maḥmūl li-l-mawḍūʿ)*; cf. *Talkhīṣ Kitāb al-jadal*, p. 116–118, ad *Topica* II 9, 114 a 26 sqq., cf. also *Long Commentary on the Metaphysics*, p. 1620, l. 12 – p. 1621, l. 3. Definitions of accidents denoted by words pertaining to type (ii) thus belong to type (A) relations of substance and accident, i.e. the subject, or rather the name of the subject, must be present in the definition, yet this without essentially including the defined accidents. 'Root morphemes', on the other hand, signify exactly the same accidents, yet not *qua* accidents belonging to this or that substance, but rather as abstract concepts detached from any substrate.

To this distinction Ibn Rushd applies Aristotle's doctrine of potentiality expounded in *Metaph.* IX (Θ) 7, in all likelihood due to the fact that Aristotle includes there linguistic considerations regarding how we predicate accidents of that which exists potentially. Aristotle explains that we have to distinguish between remote potentiality (such as that of

matter as such) and proximate potentiality (such as the potentiality of a certain piece of wood to become a casket). Proximate potentiality is predicated by paronymous terms (we do not predicate 'wood' of a casket, but rather 'wooden', in order to refer to the proximate matter). In the *Long Commentary on the Metaphysics* (p. 1172sq.) Ibn Rushd explains on *Metaph.* IX (Θ) 7, 1049 a 16–19: "It seems that that which underlies the proximate potentiality of a thing is that which is predicated of the thing which has this potency through its substrate not by a term which is a root morpheme, but rather by a paronymous term derived from this substrate." Similarly, we predicate accidental attributes (e.g. a colour) of that which is by proximate potentiality their subject (e.g. surface) not by abstract nouns (e.g. whiteness), but rather by paronymous terms (e.g. white); cf. *Metaph.* IX (Θ) 7, 1049 a 27–30, and *Long Commentary on the Metaphysics*, p. 1175. This seems to suggest that according to Ibn Rushd type (i) denominations of accidents do not admit type (A) definitions. Their relation to substance is indeterminate and, in a way, in the state of remote potentiality similar to the remote potentiality of formless matter to have actually this or that accidental attribute.

A further source of Ibn Rushd's present consideration regarding how paronymous denominations of accidents relate to substance seems to be Ibn Sīnā who, according to Ibn Rushd, maintained that predicates formed by paronymous denominations of accidents refer primarily to substance and accident together rather than to accidents, and only secondarily to substances. This doctrine is rejected in *Long Commentary on the Metaphysics*, p. 558, l. 9 – p. 559, l. 14. Cf. also above, note 33, and below, p. 121sq. of the translation.

[215] This is the definition of 'white' Ibn Rushd found in his translation of *Metaph.* X (I) 7, 1057 b 9 which, in turn, quotes Plato's definition in *Tim.* 67 E: "τὸ μὲν διακριτικὸν τῆς ὄψεως λευκόν," where διακριτικὸν means 'penetrating' or 'piercing' (referring to particles of light in the visual stream) rather than 'separating'.

[216] *ʿAlā l-taḥqīq*, i.e. yielding knowledge *simpliciter*, knowledge, that is, which includes the cause as well as the certainty that it it not possible for the object known to be otherwise; cf. Aristotle, *An. post.* I 2, 71 b 9–16, for the correspondence of *'ʿalā l-taḥqīq'* and ἁπλῶς Ibn Rushd, *Sharḥ al-Burhān*, p. 179–183.

[217] Cf. *Metaph.* VII (Z) 5, 1030 b 16–25.

[218] A paraphrase of *Metaph.* VII (Z) 5, 1030 b 26 sq.: ὥστε τούτων τὸ τί ἦν εἶναι καὶ ὁρισμὸς ἢ οὐκ ἔστιν οὐδενός.

[219] As discussed above (note 214), type (A) of (improper) definitions of accidents has to include, in addition to the accident defined, the definition of a subject distinct from it. But this is impossible in the case of *per se* attributes because they already imply their essential combination with their subject. However, not even type (B) relations of subject and accident admit proper definitions for the reason mentioned in the remaining part of this sentence.

[220] Cf. *Metaph.* VII (Z) 5, 1030 b 28 – 1031 a 1, and the commentary by W. D. Ross, *Aristotle's Metaphysics,* vol. II, p. 173 sq.

[221] Ibn Rushd now turns to the second alternative mentioned in *Metaph.* VII (Z) 5, 1030 b 26 sq. (cf. note 218): ἤ, εἰ ἔστιν (scil. ὁρισμός), ἄλλως.

[222] With this sentence, Ibn Rushd changes from definition and essence, the topic of *Metaph.* VII (Z) 4–5, to the following chapter which deals with the question whether a concrete thing is the same as its essence. A similar introduction to *Metaph.* VII (Z) 6 can be found in the *Long Commentary on the Metaphysics*, p. 823.

[223] Up to this point, Ibn Rushd has provided a summary of *Metaph.* VII (Z) 6, 1031 a 19–29, and b 3–7. The following section deals with Aristotle's criticism of Platonic Ideas as separate class of essential predicates or universals, 1031 a 29 – b 3.

[224] The previous modern translations fail to recognize *muḥtājatan ayḍan...* ('are likewise in need...') as predicate of the apodosis and interpret instead of this 'are distinct [from one another]...' as its predicate. This not only violates the syntax of the Arabic sentence but also weakens (or even invalidates) Ibn Rushd's argument.

[225] The strange reference to sensible existence at the end of this section is motivated by the Arabic translation of *Metaph.* VII (Z) 6, 1031 b 15. Having explained that self-constituted things are identical with their essence even if there are no Ideas, Aristotle adds: μᾶλλον δ'ἴσως κἂν ᾖ εἴδη ("and perhaps all the more if there are Forms," transl. W. D. Ross). Then follows a new sentence beginning with ἅμα δὲ

δῆλον καὶ ὅτι... ("At the same time it is clear that..."). The Greek version translated into Arabic must have read something else instead of καὶ ὅτι. In any case, the translator read these first words of the new sentence as continuation of the preceding one and translated: "This is appropriate, even if there are Forms; and it is not clear if they [*i.e.*, the Forms] are simultaneously (*or:* at the same time, *maʿan*, ἅμα)," Ibn Rushd, *Long Commentary on the Metaphysics*, p. 823, l. 8. Ibn Rushd tried to make sense of the enigmatic ending of this sentence by interpreting 'simultaneously', both in his Long Commentary and in the Epitome, as 'together with (or: alongside, *maʿa*) the sensible forms'. In the *Long Commentary on the Metaphysics* (p. 830) on this passage, he states: "They [*i.e.*, the Forms] are of no use for the cognition of things. Furthermore, it is not clear [...] whether they are together with the sensible forms as maintained by those who teach [the existence of] Forms."

[226] The whole section is disturbed through a lacuna after *ghayru mutaghayyira* ('unchangeable'). The passage which precedes the lacuna indicates that Ibn Rushd intended there to deal with *Metaph.* VII (Z) 6, 1031 b 15–18, where Aristotle explains that if the Ideas are separate entities, they are either not predicable of a substrate or, if so, must exist in the substrate by participation. As Ibn Rushd states in his *Long Commentary on the Metaphysics*, p. 832, l. 1–6, this would entail that the Ideas are generated and transient *(kāʾina fāsida)* which, of course, would contradict the assumption of their eternal and unchangeable existence alluded to in the present fragmentary thought of the Epitome. The passage which follows the lacuna is part of Ibn Rushd's transition from *Metaph.* VII (Z) 6 to *Metaph.* VII (Z) 7–9, Aristotle's consideration of how coming-to-be is related to form. As becomes clear from the *Long Commentary on the Metaphysics*, Ibn Rushd conceives chapters 7–9 of book VII (Z) as a refutation of the doctrine of Ideas based not on the superfluity of the assumption of separate Forms with respect to cognition (the argument of *Metaph.* VII [Z] 6), but rather on their superfluity with respect to a satisfactory explanation of how form comes into that which comes to be. At the beginning of his commentary on *Metaph.* VII (Z) 7 he says: "[Aristotle's] aim in this chapter consists in showing that the Forms taught by Plato are of no use for coming-to-be (for Plato argues that they are of use for coming-to-be, namely the use the creator makes of the paradigma of that which he

creates). [Aristotle proceeds] in this way, because having disproved that the [Forms] are of any use for knowledge (providing we grant their existence), he wants to disprove in this chapter also that they are of any use for coming-to-be (providing, again, we grant their existence)," *Long Commentary on the Metaphysics*, p. 838, l. 9–14.

Although at the present place of the Epitome Ibn Rushd does not speak of coming-to-be, but rather of 'sensible existence', it is clear from what follows that this fragmentary sentence was part of a similar train of thought and is supposed to indicate the transition to the topic of *Metaph.* VII (Z) 7–9. The only modern translator who realized that the two clauses preceding and following the lacuna do not fit together, was Horten (p. 56) who tried to solve the problem by attaching the part which precedes the lacuna to the preceding sentence. The other translations make no sense, as they insinuate that it is Ibn Rushd's aim to prove the eternity and unchangeability of Platonic Forms, which is certainly not the case.

[227] A summary of *Metaph.* VII (Z) 7, 1032 a 13–19; cf. also *Metaph.* VII (Z) 8, 1033 a 24–28.

[228] A summary of *Metaph.* VII (Z) 8, 1033 b 29 – 1034 a 2.

[229] Cf. *Metaph.* VII (Z) 9, 1034 a 9–18.

[230] Cf. Aristotle, *Physics* II 4–6, *Historia animalium* V 1, *De generatione animalium* III 11.

[231] The two versions mirror Ibn Rushd's change of position with respect to the question how immaterial animate forms are instilled in material animate beings. This question is especially pressing in the context of the problem of spontaneous generation, where there is no father who might be assumed as external cause of the generation of such an immaterial form, i.e., soul. Ibn Rushd's early position, displayed here in ms. *H* and in other works (e.g. his commentary on *De generatione animalium*), drew on Ibn Sīnā's and Ibn Bājja's doctrines of the role of the active intellect. According to this position, the heat caused by the movement of the celestial spheres is responsible for engendering natural material forms only, while the active intellect is the incorporeal source of the immaterial forms of living beings both those which are inseparable of matter (as the animal soul) and those which are separable (as the rational human soul), and this in instances

of both sexual as well as spontaneous reproduction. In his later, revised, position, displayed here in the version printed in the right column, Ibn Rushd reduced the role of the active intellect to that of the incorporeal formal cause of the separable human intellect, whereas it is now the celestial bodies which emanate through certain psychic potencies all other animate forms both in sexual and in spontaneous reproduction. The main argument in this theory is that the efficient cause of the material substrate and the efficient cause of the immaterial form of this substrate must be one and the same, since otherwise the concrete subject and its form would be distinct in actuality. The revised position is expounded in detail in the *Long Commentary* on *Metaph.* VII (Z) 9, 1034 b 4–6, *Long Commentary on the Metaphysics*, p. 881–886. For more comprehensive discussions cf. H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 220–257; D. N. Hasse, "Spontaneous Generation and the Ontology of Forms in Greek, Arabic and Medieval Latin Sources."

[232] Cf. Aristotle, *Topica* V 5, 134 b 28–33, VI 7, 146 a 16.

[233] Cf. Aristotle, *Physics* VIII 1, 250 b 14 sq.: κίνησις ... οἷον ζωή τις οὖσα τοῖς φύσει συνεστῶσι πᾶσιν.

[234] This section draws on Aristotle's model of the universe arranged in mutually contiguous spherical layers or shells expounded in *De caelo* II. According to this model the surface of the earth is surrounded by water which is encompassed by the sphere of air. Above the sphere of air there is the sphere of fire surrounded by the lunar sphere; cf. *De caelo* II 4, 287 a 33 sqq. The concave curve of the inner side of each sphere, which is in contact with the next lower sphere, is called *muqaʿʿar* by Ibn Rushd (cf. *Jawāmiʿ Kitāb al-āthār al-ʿulwiyya*, p. 15: *al-arḍ fī muqaʿʿari l-māʾi wa-l-māʾu fī muqaʿʿari l-hawāʾi wa-l-hawāʾu fī muqaʿʿari l-nāri wa-l-nāru fī muqaʿʿari l-falak*; also *Talkhīṣ Kitāb al-samāʾ wa-l-ʿālam*, p. 207, l. 4, p. 271, l. 12). The natural movement of fire is directed upwards and comes to rest in the lunar sphere which is thus what 'preserves' the form of fire, not the form of fire itself which is lightness *(khiffa)*; cf. *Talkhīṣ Kitāb al-samāʾ wa-l-ʿālam*, p. 211 sq., p. 271, l. 12 sq., and H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 236, 246 sq.

[235] Cf. *De caelo* III 8, 306 b 14 sqq.

[236] A paraphrase of *Metaph.* VII (Z) 7, 1032 b 11–14.

[237] Cf. *Metaph.* VII (Z) 7, 1032 b 18–23.

[238] Cf. Aristotle, *Eudemian Ethics* II 11, 1227 b 32; *Metaph.* VII (Z) 7, 1032 b 15–17.

[239] All previous modern translations fail to recognize the syntactical structure of this clause (*fa-* introducing the result or effect after a preceding verb expressing a wish or hope) and, thus, offer rather farfetched interpretations.

[240] The following section of the translation is based on my reconstruction of the Arabic text on the basis of the manuscripts accessible to me. All manuscripts display omissions, transpositions of passages, marginal corrections and doublets. The original version presumably ran as follows:

وكذلك الأمر في الهيولى لأنه ليس يكوّنها الفاعل فإذا كان ذلك كذلك فالكائن والفاسد هو الشخص الذي هو المركب منها وهو الشيء الذي هو والمكوّن له غير بالعدد وواحد بالصورة وإذا كان ذلك كذلك فبين أن الصور والمواد بما هي الصور ومواد غير كائنة ولا فاسدة إلا بطريق العرض أما كون الصور فاسدة ومتكوّنة وبالجملة متغيّرة فإنما ذلك لها من حيث هي جزء من الكائن الفاسد بالذات وهو الشخص الذي هو مجموع الهادة والصورة بما هي صورة لشيء مشار إليه لا بما هي صورة وكذلك الأمر في الهادة فإن التغيّر إنما يلحقها من حيث هي جزء متغيّر وهو المشار إليه فأما بما هي مادة فلا وإذا كانت الهادة هكذا التي هي سبب التغيّر اللاحق للصور فأحرى أن تكون الصور كذلك لكن كون الهادة معقولة ليس لها بما هي مادة إذ كان المعقول إنما يلحق الشيء من جهة ما هو بالفعل بل عقلها أبدا إما يكون بالمناسبة وذلك في الهادة الأولى أو من حيث عرض لها أن فعلا ما وذلك في المواد الخاصة بموجود موجود وكما يظهر أن الهادة لا يصنعها الصانع كذلك الصورة المطلقة وإنما يصنع المجموع من الهادة والصورة لأنه إنما يصنع المصوّر بتغيّره للعنصر إلى أن يفيده الصورة.

[241] Cf. *Metaph.* VII (Z) 8, 1033 b 5–7: "Obviously then the form [...] is not produced, nor does production relate to it, – i.e. the essence is not produced"; and *ibid.*, 1033 a 28sq.: "just as we do not make the substratum" (transl. W. D. Ross).

[242] Cf. *Metaph.* VII (Z) 10, 1036 a 8sq.: ἡ δ'ὕλη ἄγνωστος καθ' αὑτήν.

[243] Cf. Aristotle, *Physics* I 7, 191 a 8–11: "The underlying nature can be known by analogy. For as the bronze is to the statue, the wood to the bed, or the matter and the formless before receiving form to any thing

which has form, so is the underlying nature to substance" (transl. R. P. Hardie and R. K. Gaye); and Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1471, l. 15 – p. 1472, l. 2: "[P]rime matter is understood and conceived in a relative way, that is to say that its relation to all actual beings is like the relation of sensible matters to that of which they are matters, I mean, like the relation of the timber to the ship. According to this interpretation, the meaning of 'matter is this thing insofar as it is seen' is that prime matter is understood to be matter of this thing by means of visible matters" (transl. C. Genequand, slightly modified).

[244] Cf. *Metaph.* VII (Z) 8, 1033 b 8–10.

[245] This is, in nuce, the topic of *Metaph.* VIII (H) 2–3. The concrete material substance and its concrete form and matter are subject to coming to be and corruption, not so its actuality or form which determine its essence or definition. Cf. also Ibn Rushd, *Talkhīṣ Kitāb al-burhān*, p. 391 sq. ad *Posterior Analytics* I 6, 75 a 21 sqq.: "Having shown that the premises of proofs must be necessary and that this necessity must be essential and universal, it is clear that that which is searched for in demonstrations must be essential, because accidental objects of search cannot be known by necessity [...]. Thus it is clear that demonstrations cannot be based on transient things, except in the way of accidental [proofs], i.e. [those which hold true] at a specific time [only]. [...] That which is required in this respect for demonstration is [also] required for definition itself, I mean that the definitions are likewise neither coming to be nor passing away, since [reading *idh* instead of *idhā*] they are either the principles or the conclusions of demonstrations [...]."

[246] The former is the view ascribed to Xenophanes of Colophon, the latter the view of the Heracliteans; cf. *Metaph.* IV (Γ) 5, 1010 a 1 sqq., and Ibn Rushd's *Long Commentary on the Metaphysics*, p. 423–427.

[247] Ibn Rushd refers to Themistius' Paraphrases of *Metaph.* XII (Λ) and *De anima*, as becomes clear from related passages in his *Long Commentary on the Metaphysics*: "It seems that Themistius, too, followed this doctrine. As for beings generated spontaneously, there is no doubt about his position. He is explicit about this in his Paraphrase on Book *Lām* of this science [of metaphysics]. As for [the question whether this] applies to all forms, he says at the end of Chapter VI of his Paraphrase on *De anima* that soul is not only that in which there are

all forms (I mean the intelligible and the sensible) but also that which creates and implants all forms in matter. From these words of his we can infer that he means with this 'soul' the separate forms" (i.e. the place where such separate forms exist), *Long Commentary on the Metaphysics*, p. 882, l. 19 – p. 883, l. 7; cf. also *ibid.*, p. 1501, l. 17 – p. 1502, l. 7: "Aristotle says that man begets a man like himself, with the help of the sun. [...] Therefore it is the sun and the other stars which are principle of life for every natural living being, and it is the heat of the sun and the stars which is generated in water and earth which generates the animals generated from putrefaction and, in general, everything that is generated without seed, without there being a soul in actuality resulting from the ecliptic and the sun, as Themistius says." (transl. C. Genequand).

[248] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* IX.4, esp. p. 406–409. The intermediary Ibn Rushd is alluding to is the heat caused by the sun and the celestial spheres which serves as surrogate of the soul-heat.

[249] This sentence as well as the following one explain Aristotle's view (as conceived by Ibn Rushd). The impersonal translations provided by Quirós, Horten and Van den Bergh are not correct.

[250] In Ibn Rushd's *Tahāfut al-tahāfut* (p. 214–216), the rational order *(niẓām)* of the forms serves as argument for their supralunar origin: "Moreover, they [*i.e.*, the philosophers] had already found, concerning the human intellect, that form has two modes of existence, a sensible existence in matter [...] and an intelligible existence, namely perception and intellect, which is separate from matter and exists in the soul. From this they concluded that these entirely separate existences are pure intellects [...]. And so, of necessity, they deduced that the objects of thought of these intellects are the forms of the existents and of the order which exists in the world, as is the case with the human intellect [...]. And when they compared the separate intellects with the human intellect, they found that these intellects are superior to the human intellect, although they have it in common with the human intellect that their intelligibles are the forms of existents, and that the form of each of these intellects is nothing but the forms and the order of the existents it perceives, in the way that the human intellect is nothing but the forms and the order of the existents it perceives. The difference between these two kinds of intellect is that the forms of the existents are a cause of the

human intellect, since it receives its perfection through them [...], whereas the intelligibles of these intellects are the cause of the forms of the existents. For the order and arrangement in the existents of this sublunar world are only a consequence and result of the order which exists in these separate intellects; and the order which exists in the intellect which is in us is only a consequence of the order and arrangement which it perceives in the existents [...]," transl. Van den Bergh (slightly modified).

[251] Cf. *Metaph.* XII (Λ) 8, 1074 b 4: πρὸς τὴν πειθὼ τῶν πολλῶν.

[252] *Al-ashyāʾ al-mushtaraka* does not mean 'universals' as translated by Horten (p. 65) and Van den Bergh (p. 45), but rather that which is common to a plurality of things (τὸ κοινόν); cf. *Long Commentary on the Metaphysics*, p. 1002 ad *Metaph.* VII (Z) 16, 1040 b 22–26; *ibid.*, p. 1054 ad *Metaph.* VIII (H) 3, 1043 a 31–33, etc. All universals are common *qua* common forms, but not all that is common is a universal. Common forms are formally one, but that which is common due to abstraction of individual forms is not necessarily one by form. The best counterexample is prime matter which is common just because it lacks formal and numerical oneness; cf. *Long Commentary on the Metaphysics*, p. 1472–1474.

[253] Cf. Aristotle, *De generatione animalium* II 3, 736 b 27sq., Ibn Rushd, *Long Commentary on the Metaphysics*, p. 886, l. 11–15, and H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 232–235.

[254] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 866–868, 881–886.

[255] With this sentence Ibn Rushd turns to the question how universals are related to individual things and whether they can be their substance or essence, i.e. the topic of *Metaph.* VII (Z) 13–14.

[256] Cf. *Metaph.* VII (Z) 13, 1038 b 6–16, 30–34, 1039 a 3–5; 14, 1039 a 33 – b 4.

[257] I.e., the universal *qua* genus cannot exist in its subordinate species as numerically one in a whole unless the differentiae by which the species are distinct from one another are likewise part of this whole. For 'connected ... or intermeshed or contiguous' cf. *Metaph.* VII (Z) 14, 1039 b 6: σύγκειται καὶ ἅπτεται ἢ μέμικται.

[258] The 'third man' argument; cf. *Metaph.* VII (Z) 13, 1039 a 2, also I (A) 9, 990 b 17.

[259] Cf. Ibn Rushd, *Talkhīṣ [Epitome] Kitāb al-nafs*, ed. al-Ahwānī, p. 67–85.

[260] This expression, *'maʿqūl al-maʿqūlāt'*, obviously alludes to *De anima* III 8, 432 a 2: ὁ νοῦς εἶδος εἰδῶν.

[261] Cf. *Metaph.* VII (Z) 13, 1038 b 34 – 1039 a 2.

[262] Cf. *Metaph.* VII (Z) 13, 1039 a 15–19.

[263] Cf. Ibn Rushd's Long Commentary on the *Posterior Analytics (Averrois sev Alvlidi Rosadis in librum Arist. de Demonstratione maxima expositio)*, Venetiis apvd Ivnctas 1562, fol. 568 v D. The same definition appears also in *Long Commentary on the Metaphysics*, p. 455, l. 4 sq., and *Tahāfut al-tahāfut*, p. 103, l. 3–6, p. 302, l. 1–3.

[264] I.e., since these theologians refrain from using the appropriate methods of scientific demonstration, they cannot reach scientific knowledge anyway. What they state is not scientific knowledge. Hence, it is not affected by the fact that their denial of the existence of universals entails the impossibility of knowledge proper. It is, of course, not so with respect to true scientific knowledge, for according to Aristotle there can be no science without the universal (cf. *Posterior Analytics* I 11, I 23). The translations by Quirós, Horten, and Van den Bergh fail to grasp the ironical character of Ibn Rushd's argument.

[265] Cf. above, p. 25 sq. of the translation and note 23.

[266] For forms *qua* immaterial intelligibles which are not thought without matter (Aristotle does not use the term ἔνυλα εἴδη), cf. *Metaph.* V (Δ) 24, 1023 b 2, VII (Z) 11, 1036 a 34 – b 7, VIII (H) 6, 1045 a 33 sq. In his *Long Commentary on the Metaphysics*, Ibn Rushd distinguishes between (I) substantial and (II) accidental forms. (I) Substantial forms are either (I.A) simple immaterial or (I.B) compound material forms. Compound materials forms are again subdivided into (I.B.1) those which are separable from matter in thought, and (I.B.2) those which are inseparable. Thus, the class of inseparable material forms *(ṣuwar hayūlāniyya)* includes forms of the types (II) and (I.B.2); cf. *Long Commentary on the Metaphysics*, p. 921, l. 13 – p. 923, l. 2, p. 1602, l. 16 – p. 1603, l. 8; also *Talkhīṣ Kitāb al-nafs*, p. 8 sq. (ed. A.

Ivry). Type (I.B.2) is explained in detail in Ibn Rushd's Epitome of *De anima*: "From the preceding [section] it becomes evident that there are [different] levels *(marātib)* of material forms, and [that] also the [psychic] potencies and dispositions are ordered according to their order. The first class of material forms includes the forms of simple [bodies], namely heaviness and lightness, the substrate of which is prime matter. Next [in this class] are the forms of homeomeric bodies, then the nutritive soul, then the sensitive [soul], then the imaginative [soul]. If you consider these forms in detail, [you will see] that for each of them there is something which is common to them and in which they participate in so far as they are material as such, and something which is peculiar to each of them or to a group of them in so far as they are material in a specific way. [...] On a second [level, these forms] are essentially manifold and multiple through the diversity and multiplicity of [their] substrates. Due to these two characteristics we speak in a meaningful way of coming-to-be, for without them there would be no coming-to-be at all. [...] A third aspect is found in these material forms in so far as they are material, namely that they are composed of something which functions as form and of something which functions as matter. And a fourth aspect applies generally to [all] material forms, namely that that which is intelligible of them is different from the [extramental] existent *(al-maʿqūl ʿanhā ghayru l-mawjūd)*. This is all that can be predicated essentially of material forms, [both] with respect to what is common [to them] and with respect to what is peculiar [to each of them]," Ibn Rushd, *Talkhīṣ [Epitome] Kitāb al-nafs*, ed. al-Ahwānī, p. 83–85.

[267] Cf. Ibn Rushd, *Talkhīṣ Kitāb al-nafs*, p. 122–126 (ed. A. Ivry).

[268] Cf. *ibid.*, p. 70–72, 97.

[269] The equivocal character of the term 'false' has already been explained above (p. 75 sq. of the translation). It can refer either to the non-existence of that which is outside the mind as such (while that which is, without *adaequatio*, inside the mind is, in the veridical sense of existence, true) or to the non-existence of the conformity between that which is in the mind and that which is outside the mind. The same ambiguity between veridical and relational predication of existence holds true for the definition of the true.

[270] Cf. Ibn Rushd, *Averrois sev Alvlidi Rosadis in librum Arist. de Demonstratione maxima expositio*, Venetiis apvd Ivnctas 1562, fol.

565v–566v, *Talkhīṣ Kitāb al-ʿibāra*, p. 70sq.; cf. also D. Wirmer, "Der Begriff der Intention und seine erkenntnistheoretische Funktion in den De-anima-Kommentaren des Averroes;" and K. Gyekye, "The Terms 'prima intentio' and 'secunda intentio' in Arabic Logic."

[271] Ibn Rushd turns now to *Metaph.* VII (Z) 17. According to Aristotle, asking 'why' always means 'why does A belong to B?' or 'why is B A?'. In simple things that which belongs to B can be nothing else than B, for otherwise it would not be simple, but rather composed of A and B. Hence, inquiring simple things by asking 'why' would mean to ask 'why does B belong to B?' or 'why is B B?'. The example 'why the man is man?' is adopted from Aristotle. It does not mean that man is simple, but is supposed to illustrate that questions of the type 'why is a thing itself?' are meaningless; cf. *Metaph.* VII (Z) 17, 1041 a 10–22.

[272] Cf. *Metaph.* VII (Z) 17, 1041 b 11–19.

[273] The argument is very concise. Flesh must be more than its elements, because dissolved into its elements the actual whole will not exist, while the elements do not perish. This problem cannot be solved by assuming that flesh is in actuality in the elements fire, earth, etc., and the actual piece of flesh consists of these elements + something else, through which it is what it is, because this will again require something else which constitutes the actual whole, and so on ad infinitum. The train of thought is slightly different in *Metaph.* VII (Z) 17, 1041 b 19–26, which is paraphrased more literally in the following sentences.

[274] The 'doctrine of mixture' *(al-qawl bi-l-khalīṭ)* alludes to Anaxagoras' doctrine of an infinite number of principles which are in constant mixture (μῖγμα) and cause coming-to-be and corruption by combination and segregation; cf. Aristotle, *Physics* I 5, and Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 39sq., transl. J. Puig, p. 140.

[275] The genus does not exist apart from the species and represents the matter for definitions of material things, whereas the differentia represents its form; cf. *Metaph.* VII (Z) 12, 1038 a 5–7, VIII (H) 3, 1043 b 5–18, 6, 1045 a 33sq.; for genus *qua* matter of the definition in Aristotle and Ibn Rushd cf. M. Di Giovanni, "Averroes on the Doctrine of Genus as Matter."

[276] Hence, neither the universal nor the genus are substance or that part of the definition which appropriately states the essence of a thing; cf. *Metaph.* VIII (H) 1, 1042 a 21 sq., 3, 1043 b 10 sqq. Ibn Rushd does not say that genus and differentia exist *generally* only in the intellect, as criticized by Van den Bergh (p. 194, note 53[1]), but rather that they have no extramental existence *qua universals*. This concerns their mode of existence *qua* constitutive parts of the definition and does not preclude another mode of existence *in* the individual substances.

[277] Ibn Rushd refers perhaps to the doubts concerning the possibility of definition raised by the Antistheneans, mentioned in *Metaph.* VIII (H) 3, 1043 b 23 sqq. However, in his *Long Commentary on the Metaphysics* he propounds a different interpretation of this passage (cf. p. 1062 sq.).

[278] Provided the *alia lectio* in Mantino's translation is the original reading, Ibn Rushd refers here to the problem raised by Themistius' position that the genus can be predicated of the species in a primary and essential mode of predication. The relevance of this position with respect to the above considerations on definition is immediately evident. If genus is related to matter as differentia to form, it can hardly be admitted that genus states the very essence of the species. Ibn Rushd rejects Themistius' view in his *Long Commentary on the Posterior Analytics* as follows: "Genus cannot be predicated primarily of the species [...]. How, by God, could Themistius teach this? For he did indeed accept that genus, I mean its predication of the species, falls under this [mode of] predication, although he also accepted that primary predication is as we have defined it [above], which is [obviously] in contradiction [to the former]. [...] The truth is that genus is not predicated primarily, because it cannot be predicated of any species in so far it is this species, since it is predicated of more than one species. From this follows necessarily that genus is predicated primarily only of a nature corresponding with it. This nature is the substrate of the form which is the genus, for there is no difference in this respect between genera and the other predicates which are not specific to the substrate. This is so, because as he who knows that [the sum of the angles of] an isosceles triangle is equivalent to two right angles does not know this with respect to triangle [as such] except in an accidental way and predicates this description of it in a quidditative mode, so does he who knows [how] to predicate the genus of the species not know the nature

of which he predicates the genus in so far it is this very nature except in an accidental way. [...] We thus have to exclude predicating the genus of the species in demonstration, just as we exclude predicating the proprium of a genus of its species. If somebody asks 'how is the nature of the substrate [related] to the genus of the thing?', we state: it is its matter which is specific to the genus, for each genus must have matter." Ibn Rushd, *Sharḥ al-Burhān*, p. 247.

[279] The point Ibn Rushd wishes to make is that it has been shown that the sensible composite as a whole *(min amri l-jamīʿi)* is definable, which is why we have to consider now its parts, or the parts of its definition, separately. I therefore do not agree with Quirós (p. 102) and Van den Bergh (p. 53) who interpret *min amri l-jamīʿi* as referring to *all* sensible things, nor with Horten (p. 76) who takes it as referring to *all matters* of sensible things. Methodologically speaking, it is entirely irrelevant for the subsequent investigation of form whether all or only a limited number of sensible things or all their material elements are definable.

[280] A paraphrase of *Metaph.* VIII (H) 2, 1042 b 8–11.

[281] Cf. *Risālat al-samāʾ wa-l-ʿālam*, p. 32–34.

[282] Cf. *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p, 13–16.

[283] Cf. *Metaph.* VIII (H) 2, 1042 b 12–15.

[284] Cf. *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p, 31–33.

[285] A paraphrase of *Metaph.* VIII (H) 2, 1043 a 14–19.

[286] Aristotle touches upon this question in the context of his inquiry into the unity of essence and its definition in *Metaph.* VIII (H) 6. According to Aristotle this unity is guaranteed by that which causes the actuality of what was potentially, the efficient cause through which the form is actually established. This requires a principle of potentiality in all things subject to coming-to-be, which is why in definition there must be always an element of matter and an element of actuality or form. Hence, there must be some intelligible matter in things which have no sensible matter (cf. *Metaph.* VIII [H] 6, 1045 a 33–35). At the present place, Ibn Rushd detaches this latter argument from the entire train of thought and puts it into the context of the question whether the concept of definition developed in *Metaph.* VIII (H) 2 applies also to immaterial or mathematical objects.

[287] This refers to p. 86–89 of the translation, where Ibn Rushd deals with *Metaph.* VIII (H) 6; cf. also *Long Commentary on the Metaphysics*, p. 1095 sq.

[288] Cf. *Metaph.* VIII (H) 3, 1043 a 37 – b 4. I cannot see any 'contradiction' or 'confusion' with regard to the preceding considerations, for which Van den Bergh (p. 196, note 57^2) blames Aristotle and Ibn Rushd. In *Metaph.* VII (Z) 6, Aristotle does not state that intelligible form or essence and concrete sensible are identical in any respect, but this only with respect to what the latter is *per se*. Otherwise, the intelligible form of man (i.e., soul) would be identical with the concrete individual man including all his material accidents. This does not preclude, however, that intelligible form and individual existence are identical in the cases of immaterial substances (ψυχὴ μὲν γὰρ καὶ ψυχῇ εἶναι ταὐτόν, 1043 b 2).

[289] Cf. *Metaph.* VIII (H) 3, 1043 b 16–18.

[290] *Usṭuqussāt al-jawāhir al-mutaghayyira* does not mean 'the elements of changeable substances', as to be found in some translations, but rather 'the changeable elements of substances' such as the individual material elements, mixture, the concrete form of the composite, etc. as opposed to the unchangeable 'elements' form and matter *per se*; cf. *Metaph.* VIII (H) 3, 1043 b 5–16.

[291] Possibly, this reference goes to the relevant sections of Ibn Rushd's works on Aristotle's *De anima* dealing with the question of the separability of the intellect, e.g. *Talkhīṣ [Epitome] Kitāb al-nafs*, ed. al-Ahwānī, p. 88–90.

[292] I.e. by descriptions or statements imitating a definition proper, not 'per analogiam', as translated by Horten (p. 82) and Van den Bergh (p. 57). The use of *tashbīh* is borrowed from the hendiadys *tashbīh wa-ḥikāya* Ibn Rushd found in Abū Bishr Mattā's translation of Aristotle's *Poetics* as equivalent of μίμησις; cf. *Talkhīṣ Kitāb al-shiʿr*, ed. S. Sālim, p. 65 sq. The present section summarizes *Metaph.* VIII (H) 3, 1043 b 28–32.

[293] I.e., the parts of definition are related to the definition in another way than monads or disparate units are related to aggregates of monads because they share a common principle of unity. If numbers are indeed essences and definitions of things (an idea not entirely rejected by

Aristotle, nor by Ibn Rushd), they cannot be simple assemblages of monads; cf. *Metaph.* VIII (H) 3, 1043 b 32 – 1044 a 14; Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1064–1068.

[294] The syntagma *anwāʿ al-ṣuwar al-maḥsūsa al-ūlā* is amphibolous. It certainly does not mean 'kinds of primarily sensible forms' as rendered by Van den Bergh (p. 58). It could mean 'kinds of first sensible forms' as translated by Horten (p. 83), but this would suggest disparate groups of sensible forms part of which are first sensible forms, others second sensible forms. However, Ibn Rushd knows only one 'first form' *(al-ṣūrat al-ūlā)* of all sensible things, and this is the first mover; cf. p. 25 and p. 136 of the translation, and *Long Commentary on the Metaphysics*, p. 780, l. 11–15, p. 1686, l. 3–8. In the translation proposed here (similarly by Quirós, p. 110) 'primary kinds' does not refer to a specific class of sensible forms to the exclusion of other classes, but rather to the fact that sensible forms might be investigated principally in different respects, namely in metaphysics in so far as they are *essences* of sensible things, and in physics in so far as they are natural forms and, thus, principles of the objects of physics.

This interpretation is corroborated by Ibn Rushd's *Long Commentary* on *Metaph.* VII (Z) 3, 1029 a 33sq. ("It is agreed that there are some substances among sensible things, so that we must look first among these," transl. W. D. Ross). Ibn Rushd explains there: "You have to know that such an inquiry here [in metaphysics] differs from the inquiry into matter and form [provided] in Book I of the *Physics* in that the inquiry in the *Physics*, having followed the method of physical inquiry, resulted in showing [the existence of] first matter only in so far it is matter, not in so far it is substance, and [in showing] natural forms only, not the first form of all sensible things nor forms *qua* substances. This is so because the consideration of natural forms *qua* natural [forms] cannot result in [showing] the first form. For it is the consideration which [investigates] form *qua* substance which results in [showing] the first form. [...] Only in this science [of metaphysics] does one seek the first principle of substance. Therefore, [Aristotle] begins his inquiry with the principles of sensible substances," *Long Commentary on the Metaphysics*, p. 779sq. This investigation of sensible forms *qua* principles of sensible substances has been completed, according to Ibn Rushd's concept of the structure of the *Metaphysics*, with *Metaph.* VIII (H) 3. In the following section, he turns to the investigation of the

other principle of sensible things, matter, dealt with by Aristotle in a preliminary way in *Metaph.* VIII (H) 1, 1042 a 24 – b 7, then in detail in VIII (H) 4–5.

[295] A paraphrase of *Metaph.* VIII (H) 1, 1042 a 32 – b 7; cf. also *De generatione et corruptione* I 5–7, and *Physics* V 1.

[296] That which is eternal and exists by necessity has no potency of coming-to-be and corruption, unlike composite, sensible things. On the other hand, celestial bodies are obviously subject to the change of locomotion. Thus they require some sort of matter which is the principle of this potency to the exclusion of any other kind of change. Ibn Rushd refers here to a section of *Metaph.* IX (Θ) 8, which is closely related to the discussion of the four kinds of change just mentioned in the context of *Metaph.* VIII (H) 4. In 1050 b 18–22, Aristotle explains that (1) locomotion requires some sort of potency, (2) this potency in the case of that which is eternally and necessarily in motion is restricted to the direction of this locomotion (the 'whence' and 'whither'), and (3) there is nothing which prevents celestial bodies from having matter for this sort of potency. From the Long Commentary on this section it becomes clear that Ibn Rushd conceives the difference between this matter and the two previously mentioned types of matter underlying the other processes of change as follows: unlike the latter kinds of potency and matter, the potency in this case is not for receiving form and actuality, but rather is an eternal potency (the potency of moving into another direction) of that which is necessarily in motion anyway; cf. *Long Commentary on the Metaphysics*, p. 1203 sq., also p. 1629–1631. For Ibn Rushd's doctrine of the matter of celestial bodies cf. also M. Di Giovanni, "Averroes on the Species of Celestial Bodies," esp. p. 440–443.

[297] Ibn Rushd distinguishes frequently between various types of scientific and non-scientific propositions. However, the term 'general statements' occurs only seldom. Apparently, it serves to distinguish between the general or fundamental statements or theorems *(aqāwīl kulliyya/ʿāmma)* of a discipline and the statements propounded in and of specific or exclusive relevance for one of its subdisciplines. Cf. the end of his *Epitome of De anima*: "Here [our] discourse on the general statements *(al-aqāwīl al-kulliyya)* of the science of the soul according to the Peripatetic tradition comes to an end. As for the treatment of the

remaining particular potencies [...], this is provided in the book *De sensu et sensibili*," p. 101, ed. al-Ahwānī. Among the 'general statements' of natural sciences, Ibn Rushd mentions apart from *Phys.* VI 4: 'everything that changes must be divisible', also *Phys.* VI 5: 'everything that changes changes from something to something' (for the latter cf. *Epitome of De anima*, p. 99), and *Phys.* VIII 5: 'in each motion there must be three things: the moved, the mover, and the instrument of motion' (adduced as one of the *aqāwīl kulliyya* in *Talkhīṣ Kitāb al-nafs*, p. 143, ed. Ivry).

[298] The difference established here reflects Aristotle's distinction between common ultimate matter *qua* principle of coming-to-be and specific (οἰκεῖα) proximate matter at the beginning of *Metaph.* VIII (H) 4.

[299] Cf. *Metaph.* VIII (H) 5, 1045 a 1–5.

[300] Cf. *Metaph.* VIII (H) 4, 1044 a 27 – b 5.

[301] Ibn Rushd skips here the remaining part of *Metaph.* VIII (H) 4 and the following chapter 5, in order to turn to *Metaph.* VIII (H) 6.

[302] The distinction between actual and potential existence of matter in artefacts and natural things is problematic. However, I would not go so far as to call it illogical, as does Van den Bergh (p. 198, note 60[1]). What Ibn Rushd is referring to (without making it clear) is presumably Aristotle's doctrine according to which the concrete artefact *qua* artefact is produced from an actually existing matter by imposing a new shape on it. In this respect, matter is indeed *in actuality* in the artefact (e.g., wood remains actually wood), because it is only *qua* having such and such a shape that it is an artefact (e.g., a table), whereas matter in natural entities receives substantial form and, thus, becomes only potentially present. However, in this respect artificial things are not substances *qua* substances, in which matter always takes up the position of potentiality while form is actuality.

[303] I.e., form is the actual principle of the unity of the definiendum the matter of which is related to form as potentiality to actuality and as genus to differentia. With respect to this unity, matter, no matter whether sensible or intelligible matter, is detachable from form only in potentiality. Cf. *Metaph.* VIII (H) 6, 1045 a 20–35.

[304] Therefore, the essence of the *definiendum* is stated most properly by the last or proximate differentia (ἡ τελευταία διαφορά), cf. *Metaph.* VII (Z) 12, 1038 a 19, 29 sq.

[305] Cf. *Topica* VI 1, 139 a 5; 5, 143 a 15–28.

[306] This intermediate state between the material universal of the sensible individual and the pure form is called λόγος ἔνυλος in *De anima* I 1, 403 a 25.

[307] I.e., because genera are not extrinsic to their subordinate species, but rather are related to the differentiae by which these species are established as matter to form, thus always including a material, potential, and a formal, actual, aspect.

[308] To be found by διαίρεσις; cf. *Metaph.* VII (Z) 12, 1037 b 27 – 1038 a 18. However, the following example goes the other way round.

[309] Cf. note 292.

[310] *Al-ajnās al-mushakkaka*; for *mushakkak* cf. note 61. A close parallel to this section is found in Ibn Rushd, *Tahāfut al-tahāfut*, p. 369, l. 4–8, where in addition to 'being' and 'thing' 'entity' *(huwiyya)* and 'essence' *(dhāt)* are adduced as examples of such quasi-genera. Aristotle himself mentions 'being' and 'one' *Metaph.* VIII (H) 6, 1045 b 2 sq. Van den Bergh's harsh critique of this sentence ("ein Unding," p. 199, note 61[4]) is based on his own, wrong, translation of *mushakkak* as 'equivocal'. From the following sentence it becomes unmistakably clear that Ibn Rushd is fully aware of the fact that being and thing, according to Aristotle, cannot be genera proper.

[311] In previous passages, the concept of 'intelligible matter' referred to something which exists either in sensible individuals or in non-sensible, mathematical individuals (cf. p. 67–69, 82–84). At the present place it refers not to individuals, but rather to the generic element of definitions. The same shift is to be found in the concept of ὕλη νοητή in books VII (Z) and VIII (H) of the *Metaphysics*; cf. W. D. Ross, *Aristotle's Metaphysics*, vol. II, p. 199 sq.

[312] Cf. *Metaph.* VIII (H) 3, 1043 b 28–32; 6, 1045 a 36 – b 5, 1045 b 23. The last phrase of this section ('in short, their quiddity *[al-māhiyya-tu fīhā]* is identical with [their] being *[al-anniyya]*'), draws on 1045 b 1 ὅπερ ἕν τι [εἶναί] *(*εἶναί *om. fort. Al., secl. Bonitz)* [...] ὥσπερ καὶ ὅπερ ὄν

τι, for which Ibn Rushd found in the Arabic translation *huwa wāḥidun alladhī huwa bi-l-anniyyati ka-mithli lladhī huwa huwiyyatun mā* (*Long Commentary on the Metaphysics*, p. 1096, l. 11 sq.). This translation suggests the reading ὅπερ ἕν τῷ εἶναι [...] ὥσπερ καὶ ὅπερ ὄν τι.

[313] This question was addressed by Aristotle in *Metaph.* VII (Z) 10, 1035 b 3 sqq. and skipped by Ibn Rushd in his discussion of *Metaph.* VII (Z). The reason why Ibn Rushd returns now, at the end of his treatment of *Metaph.* VIII (H) 6, to this topic, becomes clear from the end of the following section (p. 89). Ibn Rushd read the relevant section of *Metaph.* VII (Z) 10 as the appropriate answer to those who tried to solve the problem of the unity of the definition and its parts by doctrines of composition (σύνθεσις, *tarkīb*) or connection (σύνδεσμος, *ribāṭ*), doctrines, that is, which are rejected in the final section of *Metaph.* VIII (H) 6. According to Aristotle, these doctrines failed because they searched for unity or a unifying concept for what is unified anyway by its formal cause. As Ibn Rushd explains below, the adherents of such doctrines failed to recognize the unifying formula because they did not distinguish between what is prior and posterior in definition and what is prior and posterior in the concrete material existent.

[314] For this proviso (which is omitted in ms. *H* and in the translations by Horten and Van den Bergh) cf. Aristotle, *Historia animalium* I 6, 490 b 17 sq., *De partibus animalium* I 5, 645 b 25.

[315] Cf. *Metaph.* VII (Z) 10, 1035 b 4–12.

[316] I.e., if the whole *qua* form is prior to its parts, how can there be indivisible parts which, according to the atomists, exist in actuality, that is as definable entities with an essential form, prior to the whole?

[317] They may be prior in time but not prior in being and definition, but rather posterior to or simultaneously with the whole, as Ibn Rushd explains in his *Long Commentary on the Metaphysics*, p. 910.

[318] This sentence is problematic. If Ibn Rushd refers here to definitions which necessarily include body (such as the definition of soul), so that the essential bodily parts are in a sense prior to the concrete ensouled animal, then this priority concerns the relation between the bodily parts and the concrete whole, but not the relation between the bodily parts and the *definiendum*, i.e. the soul, to which they are posterior; cf. *Metaph.* VII (Z) 10, 1035 b 14–23. If, on the other hand, he refers to

the bodily parts which, as Aristotle says, "are most important and in which the formula, i.e. the substance, is immediately present" (ὅσα κύρια καὶ ἐν ᾧ πρώτῳ ὁ λόγος καὶ ἡ οὐσία, 1035 b 25 sq., transl. W. D. Ross), then he clearly deviates from Aristotle who explains that these parts are neither prior nor posterior, but rather simultaneous (ἅμα) with the whole. From the Long Commentary on this passage it becomes clear that Ibn Rushd failed to grasp the correct meaning of the (ambiguous) Arabic translation of 1035 b 25 sq. For ἔνια δ'ἅμα, ὅσα... ('some [parts] are simultaneous, i.e. those which...') he read there *wa-t-m-ā-th-l allatī hiya...*, which, vocalised as *tamāthala*, could mean 'and those [parts] which ... are together' *[i.e.* simultaneous*]* (as was intended by the translator), but much more likely seemed to suggest the reading *wa-tumāthilu llatī hiya...* 'and these [parts, *i.e.* those dealt with before] resemble those which...', which is what Ibn Rushd understood and commented upon, cf. *Long Commentary on the Metaphysics*, p. 911, l. 1–9.

[319] I.e., providing the identity of definition and essence of the individual, the Platonists had to guarantee the unity of the definition (predicated κατὰ μέθεξις) by the unity of the individual *qua* individual with all its accidents, not by the unity of the definiendum *qua* unity of matter and form, because they failed to understand the difference between what is prior and posterior in definition and what is prior and posterior in the concrete material existent.

[320] Cf. *Metaph.* VIII (H) 6, 1045 b 8–23.

[321] Cf. above, p. 56 of the translation.

[322] On *muthul uwal* cf. notes 33 and 214. These are neither first Platonic Ideas (cf. Horten, p. 90) nor words in their primary meaning (cf. Van den Bergh, p. 63).

[323] A possible source for Ibn Rushd's report on Porphyry's position, which is not included in his *Long Commentary on the Metaphysics*, may be sought in Philoponus' *De aeternitate mundi contra Proclum* which was at least partly translated into Arabic. Philoponus mentions Porphyry there several times in the context of Plato's position on the coming-to-be of the cosmos and the question whether matter is prior or posterior to Forms (εἴδη). According to Philoponus, Porphyry explained Plato's position to the effect that Forms are neither prior nor posterior,

but rather together with matter, and that the ἀρχαὶ τοῦ κόσμου are not prime matter and form as such, but rather bodies already composed of matter and form (τὰ ἤδη ἐξ ὕλης καὶ εἴδους συστάντα σώματα); cf. Philoponus, *De aeternitate mundi contra Proclum*, p. 164–166 (English transl. in *Philoponus: Against Proclus on the Eternity of the World 6–8*, p. 39–41), p. 545–547 (English transl. in *Philoponus: Against Proclus on the Eternity of the World 12–18*, p. 58 sq.).

Another source, which was likewise at least partially accessible in Arabic, is Simplicius' Commentary on Aristotle's *Categories*. The section on *Cat.* 1 a 24 sqq. deals with the question what it means to say that something is/is not in a substrate (ἐν ὑποκειμένῳ), and the subsequent problem that body *qua* substance cannot be in a substrate according to the definition of substance as that which is not in a substrate, whereas on the other hand that which constitutes body *qua* body, such as magnitude, figure, etc., obviously *is* somehow in a substrate, namely in prime matter. Simplicius reports Stoic philosophers having raised the following objection: "if [...] we say that things which complete a substance (*ta sumplêrôtika tês ousias*) are parts of the substance, and that which simply completes the being of a sensible body is colour, figure, magnitude, and simply quality and quantity [...], then one of two things is necessary: either not to say that these things are in a substrate, or [to say that] it was not correct to deny of things in a substrate that they are like parts. How, moreover, is it possible for completers (*ta sumplêrôtika*), in general, to be said to be in a substrate?", Simplicius, *On Aristotle's 'Categories 1–4'*, transl. M. Chase, p. 62. In reply to this objection Simplicius refers to Porphyry as follows: "Porphyry solves this difficulty in the following way: 'There are', he says, 'two kinds of substrate, not only according to those from the Stoa, but also according to the more ancient thinkers. Qualityless matter (*hê ... apoios hulê*), which Aristotle calls 'potential body', is the first meaning of 'substrate', and the second is that which comes into existence as either a commonly qualified thing or as something individually qualified. [...] Therefore', he says, 'many of the things which inhere are in a substrate with regard to the first substrate (ὡς μὲν πρὸς τὸ πρῶτον ὑποκείμενον); for instance, all colour and all figure and all quality are in prime matter as their substrate, not as parts of it and incapable of existing apart from it. In the case of second substrate, however, not all colour nor all quality is in a substrate, but [they are so only] when they are not completers (*sumplêrôtikai*) of substance," *ibid.*, p. 62 (quotation in

Greek letters added, cf. p. 48 of the Greek edition, *CAG* 8). This two-fold concept of the substrate as well as the discrepancy between the Stoic position and that which is described by Porphyry as the position of the Stoa and the more ancient philosophers are closely related to the doctrines of spatial extension ascribed by Ibn Rushd to Porphyry and his Platonic and Stoic sources. A slightly different report of Porphyry's position is also found in Dexippus' Commentary on the *Categories*. For the discussion of this question in the context of the Aristotelian *Categories* in late antiquity, and especially for Porphyry's position, cf. F. De Haas, *John Philoponus' New Definition of Prime Matter*, p. 165 sqq., esp. p. 177 sq., 194–210.

[324] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* II.2, p. 63: "From this it is clear that, for a body to be body in actuality, it is not necessary that there should in actuality be three dimensions in body in the manner [normally] understood by these three dimensions. [...] Rather, the meaning of the description of a body is that the body is the substance for which it is possible for you to begin by postulating in it a dimension in whatever manner you desire. [...] It is due to the body's having this description that one refers to body as being long, wide, and deep, just as it is said that body is that which is divisible in [terms] of all dimensions. It is not meant by this that it is divided in actuality, as something completed; rather, [it is understood] as being of a nature that this division is postulated of it. This, then, is how body should be defined – namely, that it is the substance that has this form by virtue of which it is what it is and that the rest of the dimensions postulated between its limits, and also its limits, its shapes, and its positions, are not matters that render it subsistent but are, rather, sequels to its substance," transl. M. E. Marmura (slightly modified); cf. also *ibid.*, IX.5, p. 413.

[325] Cf. Ibn Rushd, *Risālat al-samāʾ wa-l-ʿālam*, p. 25.

[326] For *al-basāʾiṭ* as equivalent of the four simple elements *(al-usṭuqussāt al-arbaʿa)* cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 127, l. 14 sq., *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 9, l. 10. At other places *'al-basāʾiṭ'* includes also celestial bodies; cf. note 519.

[327] Cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 50–52.

[328] Because change, no matter whether in substance or in quality, always is in a substrate, cf. *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 5, l.

6–8. Alteration *(istiḥāla)* is either in substance or in quality, cf. *Risālat al-kawn wa-l-fasād*, p. 98, l. 2–5; and alteration and substrate are mutual prerequisites; cf. *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 5, l. 8 sq., p. 89, l. 13 sq. If prime matter has form prior to the forms of the simple elements, the coming-to-be of the latter must be alteration in substance. Hence, there would be no eternal cyclical coming-to-be of the elements from one another caused by the movement of the heavens. But this is exactly what Aristotle teaches in *De generatione et corruptione* according to Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 140–143; cf. also *Long Commentary on the Metaphysics*, p. 91, l. 3–14, and Quirós' translation of the Epitome, p. 123 sq., note (2).

[329] I.e., as a sort of ἕξις or habitus of prime matter; cf. note 332.

[330] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt*, V.3, p. 219.

[331] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 97 sq., *Sharḥ al-Burhān*, p. 247 sq.

[332] Prime matter is *one* for the simple elements inasmuch as they come to be from one another and change into one another, and it is *many* for the simple elements inasmuch as it constitutes the multiplicity of their potencies to receive contrary forms. The dimensions *qua* general form of the natural impetus of the elements thus occupy a sort of middle position between the absolute potentiality of prime matter as such and the actual dimensions and natural impetus of the simple elements in actuality, which are determined by their contrary forms; cf. Ibn Rushd, *Talkhīṣ Kitāb al-kawn wa-l-fasād*, p. 29, l. 5–9, p. 32, l. 8–12; also *Long Commentary on the Metaphysics*, p. 500 sq.

[333] Two sciences can have one and the same object of search *(maṭlūb)* in two different ways. Either they investigate this object in two disparate respects, or they complement each other in that one science investigates and proves the existence of the object of inquiry, while the other investigates the reason of its existence; cf. *Posterior Analytics* I 13, 78 b 34 – 79 a 16, Ibn Rushd, *Sharḥ al-Burhān*, p. 366 sq., *Talkhīṣ Kitāb al-burhān*, p. 408 sq. Since physics proves both the existence as well as the cause of the existence of the dimensions, it is evidently the first mode of one common object of research shared by mathematics and physics that Ibn Rushd refers to here.

[334] As we have seen, Ibn Rushd focused in this chapter on books VII (Z) and VIII (H) of the *Metaphysics*, which is what led I. Mantino to revise the present remark ("continet ex libris attributis Arist. id, quod in Septimo, & Octauo ipsius habetur," fol. 374va). Similarly, Ibn Rushd refers at the beginning of Chapter III of the present work to book X (I) as 'the ninth book' *(al-maqāla al-tāsiʿa)* of the *Metaphysics*. The most plausible explanation for this confusion is that Ibn Rushd, when composing the present work, had at his disposal only the Arabic translation of the *Metaphysics* prepared by Usṭāth which in all likelihood lacked a translation of book I (A) or circulated in copies lacking this book; cf. M. Bouyges, *Notice*, p. cxxviii sq., A. Bertolacci, "On the Arabic Translations of Aristotle's *Metaphysics*," p. 246. Thus books six and seven in this translation corresponded with books VII (Z) and VIII (H) of the Greek text. This assumption is corroborated by the fact that Ibn Rushd makes no use of book I (A) in his so-called Epitome; cf. also the note found at the end of book II (α) of Ibn Rushd's *Long Commentary on the Metaphysics*, p. 54, l. 3–5.

[335] I.e. book X (I), cf. note 334. The concept of concomitants of one and many is presumably adopted from Ibn Sīnā, who refers to things like equal, same, similar, etc. and their opposites as things that follow *(tawābiʿ)* one and many or as their concomitants *(lawāḥiq)* or concomitant accidents *(ʿawāriḍ lāzima)*; cf. *al-Shifāʾ: al-Ilāhiyyāt*, p. 27, l. 5, p. 163, l. 5, p. 303, l. 3, and A. Bertolacci, *The Reception of Aristotle's Metaphysics*, p. 162–180. It is no longer employed in Ibn Rushd's *Long Commentary on the Metaphysics*.

[336] Ibn Rushd thus proceeds according to the arrangement of Aristotle's *Metaphysics*. Having dealt with the central topics of books VII (Z) and VIII (H) in the preceding chapter, he turns now to potency and actuality, the topic of book IX (Θ). The main subjects of books IX (Θ) and X (I) are depicted in the Epitome as concomitants *(lawāḥiq)* of sensible being *qua* being (cf. also p. 22, 25 of the translation). In the *Long Commentary*, on the other hand, books VII-X are described as that unit of the *Metaphysics* which studies the major species *(anwāʿ)* of being and, as such, is subdivided into three parts: (1) the division of being into substance and accident (to be studied in books VII [Z] and VIII [H]), (2) the division of being into potentiality and actuality (to be studied in book IX [Θ]), and (3) the division of being into one and many (to be studied in book X [I]), cf. *Long Commentary on the Metaphysics*, p. 744, l. 4 – p. 745, l. 3, also M. Bouyges, *Notice*, p. lv.

[337] Cf. p. 44sq. of the translation.

[338] Cf. *Metaph.* IX (Θ) 1, 1046 a 6: τούτων δ'ὅσαι μὲν ὁμωνύμως λέγονται δυνάμεις ἀφείσθωσαν. ἔνιαι γὰρ ὁμοιότητί τινι λέγονται, καθάπερ ἐν γεωμετρίᾳ .... This geometrical use of 'having power' or 'potency' was classified above, p. 44, as figurative rather than equivocal predication; thus also in the *Long Commentary on the Metaphysics*, p. 1109, l. 2–7.

[339] From the beginning of the sentence, *'wa-aḥadu l-ashyāʾi ...'* (lit. 'One of the things...'), one would expect an enumeration of further classes of things of which 'potency' is predicated by analogy. However, a second type of analogical predication of 'potency', namely the potentiality of the substrate to receive the form, is not mentioned before p. 102sq. of the translation. What marks off this kind of potentiality is the fact that it constitutes the nature of the substrate as such, whereas the present 'class' of potencies seems to require the actual existence of their substrates, while the potencies themselves correspond to the accidental categories of doing and being acted on.

[340] What Ibn Rushd calls 'active potency' *(quwwa fāʿila)* corresponds to what Aristotle describes in *Metaph.* IX (Θ) 1046 a 10sq. as "starting-point of change in another thing or in the thing itself *qua* other (ἢ ᾗ ἄλλο)" (transl. W. D. Ross). The latter alternative (ἢ ᾗ ἄλλο) is exemplified by the self-treating physician which is of interest for the transmission of the Arabic translations of the *Metaphysics*, as the translation quoted and commented upon by Ibn Rushd in his *Long Commentary on the Metaphysics* (p. 1106, l. 13, p. 1110, l. 5) translates ἐν ἄλλῳ ᾗ ἄλλο instead of ἐν ἄλλῳ ἢ ᾗ ἄλλο.

[341] 'Passive potencies' *(al-quwā al-munfaʿila)* correspond to what Aristotle describes *Metaph.* 1046 a 11–13 as "potentiality for being acted on, i.e. the principle in the very thing acted on, which makes it capable of being changed and acted on by another thing or by itself regarded as other (ὑπ' ἄλλου ἢ ᾗ ἄλλο)" (transl. W. D. Ross). In this case, both the translation employed by Ibn Rushd for the Epitome as well as the quotation in his *Long Commentary* display the variant reading ᾗ ἄλλο instead of ἢ ᾗ ἄλλο which led Ibn Rushd to emphasize that this kind of potency does not admit being acted on by itself; cf. *Long Commentary on the Metaphysics*, p. 1107, l. 1, p. 1110, l. 9–11: "He means: Therefore, the passive potency is that which is susceptible to

change in itself by another [thing] *qua* other, since it is [...] self-evident that a thing is not acted on by itself."

[342] Cf. above, p. 43 of the translation. The present sentence is a summary of *Metaph.* IX (Θ) 1, 1046 a 29–35, which is related by Ibn Rushd to the second type of potency predicated by analogy due to his interpretation of *Metaph.* 1046 a 11–13, cf. the preceding note.

[343] This question is addressed in *Metaph.* IX (Θ) 7 where Aristotle distinguishes between (1) potentiality in natural things which have the principle of the actualization in themselves and come to actuality when nothing external hinders, and (2) potentiality in artefacts where the principle of the actualization is external, so that their actualization depends (a) on being acted on by this external moving cause and (b) on the fact that nothing in themselves (e.g. the material of the potential house, etc.) prevents their actualization.

[344] I.e., the principle of actualization of health, being a natural potency, lies in that which is potentially in health. What the physician can do is transforming illness into potential health, but not transforming potential health into health in actuality. Cf. also Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* IX.3, p. 395, l. 12–14.

[345] As in his *Long Commentary*, Ibn Rushd uses in the present section now *shawq*, now *shahwa* as equivalents of Greek ὄρεξις, cf. *Long Commentary on the Metaphysics*, p. 1153, l. 14 – p. 1155, l. 17. In the translation both terms are rendered by 'desire'.

[346] The preceding section is a summary of *Metaph.* IX (Θ) 2. In the following paragraph, Ibn Rushd turns to *Metaph.* IX (Θ) 5, 1047 b 35 – 1048 a 16.

[347] Quirós and Van den Bergh try to make sense of the reading 'potency of consensus' *(quwwat al-ijmāʿ)* in the Arabic manuscripts. Even if *ijmāʿ* had the meaning of κατάφασις, which is not the case, the present statement has nothing to do with *De anima* III 7, 431 a 9, as argued by Van den Bergh (p. 205 sq., note 69[3]), but rather draws on *De an.* III 10. Nor does *quwwat al-ijmāʿ* mean 'potencia decisiva', as proposed by Quirós, who is furthermore wrong in ascribing to this potency the task of deciding between two contrary possible effects (cf. Quirós, p. 133, note 1). As Ibn Rushd explicitly states, it is will and desire what decides, and this *in the state of connection* or *co-operation* with this

potency, rather than the latter itself. What is still more problematic, Ibn Rushd speaks nowhere else about such a 'potency of consensus'. What he propounds in a very detailed manner in both his Middle as well as his Short Commentary on *De anima* is that in cases of two contrary possible movements (as well as of movement in general) the decision depends not only on will and desire, but rather is reached by this potency in connection with the potency of imagination; cf. *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 65, 99 sq. (ed. Ahwānī), *Talkhīṣ Kitāb al-nafs*, p. 142–146 (ed. Ivry). In the Epitome of *De anima* we even find an almost literal parallel to the present phrase. Compare *'al-shawq [...] idhā qtarana ilā hādhihi l-quwwati* (scil. *quwwati l-takhayyul*), *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 65, and *shawqan wa-khtiyāran idhā qtarana bi-hādhihi l-quwwati quwwatu l-khayāl* in the present passage. I therefore propose instead of *al-ijmāʿ* or *al-jimāʿ* the reading *al-khayāl* which resembles the former in handwriting to such a degree that a misreading in the transmission of the manuscripts cannot be ruled out per se.

[348] *Mā kāna jayyidu l-fiʿl* with *mā al-sharṭiyya* rather than relative *mā* as rendered in the three previous modern translations.

[349] Cf. *Metaph.* IX (Θ) 2, 1046 b 24–28: φανερὸν δὲ καὶ ὅτι τῇ μὲν τοῦ εὖ δυνάμει ἀκολουθεῖ *[tābiʿun]* ἡ τοῦ μόνον ποιῆσαι ἢ παθεῖν δύναμις, ταύτῃ δ'ἐκείνη οὐκ ἀεί· ἀνάγκη γὰρ τὸν εὖ ποιοῦντα καὶ ποιεῖν, τὸν δὲ μόνον ποιοῦντα οὐκ ἀνάγκη καὶ εὖ ποιεῖν.

[350] *Mumkin*, corresponding to τὸ δυνατόν, *Metaph.* IX (Θ) 6, 1048 a 27.

[351] Cf. *Metaph.* IX (Θ) 6, 1048 a 25–32. The problem is not so much that this meaning of 'potency' cannot be deduced from potency relative to movement, as suggested in the translations by Horten (p. 98) and Van den Bergh (p. 70), but rather that we are dealing with another kind of potency whose priority over to the other meanings can only be understood by taking actuality into consideration; cf. also *Long Commentary on the Metaphysics*, p. 1158, l. 13 – p. 1159, l. 3.

[352] Cf. *Metaph.* IX (Θ) 6, 1048 a 36 sq. Like one and being, potency and actuality are each one only by analogy. Hence, they cannot be defined in the strict sense of definition by stating genus and differentia. (N.B.: A literal quotation of the present sentence is found in *Long*

Commentary on the Metaphysics, p. 1160, l. 3 sq. The Epitome confirms the doubtful reading of *watīra* there.)

[353] Unfortunately, Ibn Rushd does not elaborate on this interesting thought which is closely related to the medieval Latin discussion on how to determine the transcendentals. Van den Bergh's critique of this passage (p. 206 sq., note 70^2) is pedantic and, to quote W. D. Ross, 'beside the mark' (*Aristotle's Metaphysics*, vol. II, p. 251).

[354] Cf. Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* I.5, p. 30, 35 sq. (transl. Marmura, p. 23, 27 sq.)

[355] Cf. Aristotle, *Cat.* 7, 7 b 15 sqq., 13, 14 b 27–33; for actuality and potentiality especially *De anima* III 2, 425 b 25 – 426 a 25.

[356] Literally 'something the soul makes in the existents' *(shayʾun tafʿaluhu l-nafsu fī l-mawjūdāt)*. The locus classicus in this context is *Cat.* 7, 8 a 13 sqq.: "It is a problem whether (as one would think) *no* substance is spoken of as a relative, or whether this is possible with regard to some secondary substances. In the case of primary substances it is true; neither wholes nor parts are spoken of in relation to anything. [...] With such cases, then, it is obvious that they are not relatives, but with some secondary substances there is room for dispute. For example, a head is called someone's head and a hand is called someone's hand, and so on; so that these would seem to be relatives," transl. J. L. Ackrill. I.e., the question is whether there are substances the essential being of which consists in being-related-to-something, or whether being-related-to-something is in all cases, no matter whether first or second substances, a mental concept applied to such substances yet distinct from their essential being. The following lines, *Cat.* 7, 8 a 28–34, do not really clarify the problem. Likewise, Ibn Rushd's explanations of this passage in his Middle Commentary are quite enigmatic. He appears to be saying there almost the opposite of what Aristotle seems to hold, namely that in the case of relatives such as head and hand the relation is purely accidental (cf. *Talkhīṣ Kitāb al-maqūlāt*, p. 66, l. 11–14), whereas it is in cases of correlative accidents whose relationality is immediately evident *(fī bādiʾ al-raʾy)*, such as few and many *(al-qalīl wa-l-kathīr)*, that we are faced with a real or essential relation *(al-iḍāfat al-ḥaqīqiyya)* (cf. *ibid.*, p. 66, l. 14 – p. 67, l. 1). This would entail that there is indeed no essential being-related-to-something at all. Hence, the present sentence might be interpreted as saying

that being-related-to-something is either accidental, and thus connected with substantial extramental entities in thought, or if it is substantial, this only in secondary substances which exist in the mind. This interpretation seems to be confirmed by a note in Ibn Rushd's *Tahāfut al-tahāfut* which says: "In truth, relation is an attribute added to that which is correlative in the existents outside the soul. Relations occurring between intelligibles, on the other hand, constitute a disposition *(ḥālan)* which is even more appropriately than to the latter [described by the fact] that it is an attribute added to that which is correlative," *Tahāfut al-tahāfut*, p. 350, l. 13 sqq.

[357] *Iḍāfa* ('relation') translates in the Arabic version of *Cat.* used by Ibn Rushd the category πρός τι, *nisba* ('relationship [in general]') any kind of relation to something else, e.g. πρὸς ἕτερον, *Cat.* 6 a 37.

[358] Cf. *Metaph.* IX (Θ) 6, 1048 a 30–32: ἔστι δὴ ἐνέργεια τὸ ὑπάρχειν τὸ πρᾶγμα μὴ οὕτως ὥσπερ λέγομεν δυνάμει·

[359] A paraphrase of *Metaph.* IX (Θ) 6, 1048 b 14–17. Another particular meaning of potentiality is that applied to the void, mentioned by Aristotle in the same context (1048 b 10) but skipped here by Ibn Rushd.

[360] Cf. Aristotle, *Physics* III 4–8, Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 34–45.

[361] I.e., that potentiality is in a primary mode in substance, and only secondarily in accidents, not that acting is either acting on itself or acting on another thing, as suggested in the translations by Quirós (p. 137) and Van den Bergh (p. 71).

[362] All previous modern translations are wrong in interpreting *li-l-shayʾi l-mumkini* in *wujūda l-imkāni mutaqaddiman li-l-shayʾi l-mumkini* as governed by *mutaqaddiman* (cf. Quirós, p. 138, Horten, p. 101, Van den Bergh, p. 72). Transitive *taqaddama/mutaqaddimun* is construed either with *fī* or *bi* in the sense of being prior *in a certain respect*, e.g. being, knowledge etc., or with *ʿalā* or accusative in the sense of being prior *to s.th.* (or in a combination of the two modes of government). The question addressed here is not whether potentiality is prior to the potential thing, but rather whether the potentiality of that which is in potentiality is prior to its actuality, in other words, whether there is potentiality only when there actually is a co-ordinate actuality.

The latter was the position of the Megaric school dismissed by Aristotle in *Metaph.* IX (Θ) 3. Ibn Rushd's reference to contemporary thinkers alludes to the Ashʿarites, cf. *Tahāfut al-tahāfut*, p. 93, l. 8 sqq., and Van den Bergh's note on p. 52.6 of his translation of the *Tahāfut al-tahāfut*, vol. II, p. 37–40.

[363] I.e., they neglected or denied possibility on the part of the recipient; cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 100–102.

[364] Cf. above, note 23.

[365] I.e., the principle of the temporal priority of possibility in the individual.

[366] Cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 103, l. 7–9.

[367] *Istiṭāʿa wa-qudra* does not mean 'liberty and free will' (or vice versa), as translated by Quirós (p. 139) and Van den Bergh (p. 72). For the difference between *qudra* ('the power to act') and will *(irāda)*, cf. *Tahāfut al-tahāfut*, p. 150–152, p. 315, l. 1–5.

[368] For Ibn Rushd's distinction between *irāda* and *ikhtiyār* cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 148, idem, *al-Kashf ʿan manāhij al-adilla fī ʿaqāʾid al-milla*, p. 226 (ed. M. Qāsim, Cairo 1955).

[369] *Al-ṣanāʾiʿ al-fāʿila*. These are, for example, medicine, the *technê* of civilization *(ṣināʿat al-tamaddun)*, or agriculture; cf. *Long Commentary on the Metaphysics*, p. 783, l. 6–9, p. 876, l. 14 sqq., *al-Kulliyyāt fī l-ṭibb [Colliget]*, p. 19 sq. (ed. S. Shaybān, ʿA. al-Ṭālibī, Cairo 1989); cf. also above, note 4.

[370] Cf. the beginning of *Metaph.* IX (Θ) 7, 1048 b 35–37: τὸ μὲν οὖν ἐνεργείᾳ τί τ'ἐστί καὶ ποῖον [...] δῆλον ἡμῖν ἔστω. πότε δὲ δυνάμει ἔστιν ἕκαστον καὶ πότε οὔ, διοριστέον·

[371] This clearly refers to the continuation of *Metaph.* IX (Θ) 7, 1048 b 35–37 (cf. preceding note): οὐ γὰρ ὁποτεοῦν ("for it [*i.e.* the potential] is not at any and every time," transl. W. D. Ross). One is tempted to read *ayya waqtin* ('at any time') instead of *ayya shayʾin* ('anything'). However, a look at Ibn Rushd's *Long Commentary* reveals that the Arabic translation employed by Ibn Rushd there is based on a variant Greek reading. Instead of οὐ γὰρ ὁποτεοῦν. οἷον [...] (where οἷον marks the beginning of a new sentence) the Arabic translation read οὐ γάρ

ποτε οὐχ ὅμοιον, rendered by *fa-innahū lā yakūnu abadan wa-lā shabīhun* (*sic* ms. pro *shabīhan*) ('for it is not always nor similar'); cf. *Long Commentary on the Metaphysics*, p. 1165, l. 4; also *GALex* I p. 8 (§ 2.1). In his *Long Commentary* Ibn Rushd takes 'nor similar' as referring to a dissimilarity of the potential recipient and the actual act received by it *(al-maqbūl)*, cf. *Long Commentary on the Metaphysics*, p. 1168, l. 12–14, for the terms *qābil* and *maqbūl* in the context of potentiality cf. also *Tahāfut al-tahāfut*, p. 376 sq. Neither the variant reading of the Aristotelian text nor Ibn Rushd's commentary justifies any emendation of the present sentence of the Epitome. On the other hand, we cannot preclude that Ibn Rushd used for the Epitome a version different from that quoted in the *Long Commentary* (on this point cf. also note 374).

[372] From what follows it becomes clear that this distinction correlates with Ibn Rushd's explanation on the relationship between remote and proximate matter and the individual material thing (on *Metaph.* VIII [H] 4), above p. 87 sq. of the translation. What a specific potentiality is, is determined by the proximate substrate. Any remote potentiality requires prior to its actualization change in substrate. The distinction is motivated by *Metaph.* IX (Θ) 7, 1049 a 1 sq., and found in Ibn Rushd's *Long Commentary* ad loc., too.

[373] *Bi-tajawwuz*. Naming s.th. *bi-tajawwuz* means to refer to it by something similar *(shabīhuhū)* or by its cause *(sababuhū)* or by a concomitant *(lāḥiquhū)* or by what is associated with it *(muqāranuhū)*; cf. Ibn Rushd, *Faṣl al-maqāl*, p. 34, l. 12–14.

[374] This is an almost literal paraphrase of *Metaph.* IX (Θ) 7, 1049 a 1 sq.: οἷον ἡ γῆ ἆρ' ἐστὶν δυνάμει ἄνθρωπος; ἢ οὔ, ἀλλὰ μᾶλλον ὅταν ἤδη γένηται σπέρμα, which is strange inasmuch as we have seen above that Ibn Rushd relies in his *Long Commentary* on an Arabic version which is based on a variant reading of the beginning of this sentence (cf. note 371). Not only that, the Arabic translation quoted in the textus of the *Long Commentary* suggests the reading γάρ instead of γῆ ἆρ' (cf. Bouyges, *NOTICE*, p. clxx) and certainly neither the translation nor Ibn Rushd's *Long Commentary* touch upon γῆ ('earth'). Commenting on the passage in question, Ibn Rushd even turns to a second translation because he cannot make much sense of it. This second translation is more lucid, yet like the first one it says nothing about 'earth': "This

meaning is more transparent in another translation which says: 'Man was not man in potentiality when he was not, but rather when he was semen'," *Long Commentary on the Metaphysics*, p. 1169, l. 3 sq. The present sentence of the Epitome, on the other hand, refers with *al-barr* in all likelihood to γῆ, which raises the questions what source Ibn Rushd was relying on in his Epitome and why he did not consult this source when composing the *Long Commentary*. N.B.: Van den Bergh reads, like I. Mantino ('in frumento', fol. 376ra-b) *al-burr* ('wheat corn') instead of *al-barr* ('earth') and points to *Metaph.* IX (Θ) 8, 1049 b 21 sq. (cf. Van den Bergh, p. 210 sq., note 73[1]). However, what Aristotle says there is not that corn is in potentiality man, but rather that matter and seed (σπέρμα) and being capable of seeing, which are in potentiality man and corn (σῖτος) and seeing in actuality, are temporally prior to the concrete man, corn and act of seeing in actuality. Both doctrinal context and examples are different from the present section of the Epitome. For *barr* rendering γῆ in other Graeco-Arabic translations, cf. *GALex*, fasc. 9, s. radice *B-R-R* (I am grateful to Gerhard Endress for having put at my disposal a preprint version of this lexicon entry); for examples in Ibn Rushd's works cf. *[Epitome] Kitāb al-āthār al-ʿulwiyya*, p. 31, l. 21–24; *Talkhīṣ Kitāb al-mughālaṭa*, p. 679, l. 7. For *burr* as equivalent of σῖτος, cf. M. Ullmann, *WGAÜ* Suppl. II, p. 285. For another passage (namely *Metaph.* IX [Θ] 7, 1049 a 12–15) which might be interpreted in the sense applied by Van den Bergh and Mantino to the present section, cf. the following note.

[375] Ibn Rushd's point of reference is *Metaph.* IX (Θ) 7, 1049 a 12–15, the Greek version of which says the following: "And in the cases in which the source of the becoming is in the very thing [which suffers change], all those things [are said to be potentially something else,] which will be it of themselves if nothing external hinders them. E.g. the seed is not yet [potentially a man]; for it must further undergo a change in a foreign [medium]" (transl. W. D. Ross, square brackets added in order to indicate Ross' insertions). However, the Arabic version quoted in Ibn Rushd's *Long Commentary* runs as follows: "Furthermore, all that has the principle of becoming in itself [is] all that through which none of those [things] comes to be which are hindered from outside [*based on* τῶν ἔξωθεν ἐμποδιζόντων ... δι' αὐτῶν *instead of* τῶν ἔξωθεν ἐμποδίζοντος ... δι' αὐτοῦ *?*]. E.g. semen, for it is not subject to change when it is in something else [*based on* οὐ (οὐκέτι?) γάρ εἰ ἐν

ἄλλῳ μεταβάλλει *instead of* οὔπω· δεῖ γὰρ ἐν ἄλλῳ καὶ μεταβάλλειν *?*],"
Long Commentary on the Metaphysics, p. 1166, l. 3–5, cf. the lemmata, p. 1171, l. 8 sq., l. 13. While the Greek text asks how that which has the principle of becoming in itself becomes something else, the Arabic translation determines that which has the principle of becoming in itself as that which does not become something that might be hindered from outside and which is not subject to change when it is in something else. From this, Ibn Rushd infers that no part of that which comes to be from that which has the principle of becoming in itself is in need of an extrinsic moving cause in order to become what it potentially is; cf. *ibid.*, p. 1171, l. 9–12. This seemed to correspond with the statement that semen is not subject to change propounded in the Arabic translation. The only additional condition which, according to the translation, had to be met in order that semen be in potentiality man consisted in its being in something else. It is on this basis that we have to understand the present remark in the Epitome. *Qua* potentiality which has the principle of becoming in itself semen is potentially man without any change through an extrinsic moving cause, that is, provided it is not changed from outside, as the Epitome takes it, i.e. when it is placed into the uterus so that any contact with and change through the ambient air is kept off.

[376] For *ḥīnaʾidhin* (lit. 'at that time') cf. *Long Commentary on the Metaphysics*, p. 1171, l. 16 sq. (where *lā yuqālu*, transmitted in the Arabic ms. and rejected by Bouyges, is the correct reading).

[377] The phrase *yakūnu abadan min nawʿin wāḥidin wa-muḥarrikun wāḥidun bi-l-ʿadadi* is ambiguous. I very much doubt that Ibn Rushd intends to say that that which moves the potential into actuality is one in species and one in number, as translated by Quirós (p. 141) and Horten (p. 103). Nor does he say that that which moves and the potential belong to one and the same genus of being, as translated and subsequently refuted by Van den Bergh (p. 73, and p. 211, note 73^4). The remark, rather, refers to different classes of potentialities and their movers or principles of change. Above all, there is the distinction between movers which are themselves in motion and unmoved movers; e.g. *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 99 (ed. Ahwānī), *Talkhīṣ Kitāb al-nafs*, p. 66 (ed. Ivry), *Long Commentary on the Metaphysics*, p. 1573. Secondly, Ibn Rushd distinguishes between movers which move constantly and those which move from time to time; cf. *Jawāmiʿ Kitāb*

al-samāʿ al-ṭabīʿī, p. 145, below, p. 139 sq. of the present translation. Thirdly, he distinguishes between technical or 'artifical movers' *(muḥarrikāt ṣināʿiyya)* and potentialities *vs.* 'natural movers' *(muḥarrikāt ṭabīʿiyya)* and potentialities, cf. above, p. 101, and what follows below; also *Long Commentary on the Metaphysics*, p. 1179, l. 11 sq. This latter distinction corresponds with Aristotle's distinction between artistic actualization of a potentiality by an external artist and natural actualization of that which has the principle of movement or actualization in itself. In the latter the proximate potentiality is of such a kind that the principle of change is in the potential thing itself, no matter whether this is conceived as nature (*qua* principle of change in the thing *qua* that very thing) or as the individual potentiality to become something else (which is in the thing *qua* other), cf. above, p. 96 sq. of the translation. There is thus a species of principles of change in natural things distinct from a species of principles of change in artifical things through their property of being necessarily inherent in the thing in proximate potentiality. This is indicated by Aristotle himself in *Metaph.* IX (Θ) 8, 1049 b 8 sq.: "nature also is in the same genus as potentiality; for it is a principle of movement—not, however, in something else but in the thing itself *qua* itself" (transl. W. D. Ross). It is this species of principles of movement under which Ibn Rushd here subsumes all individual moving causes (*qua* principles of change) of proximate natural potentialities.

[378] On blood as ultimate nourishment and proximate potentiality of flesh, cf. Aristotle, *De partibus animalium* II 3–6, 650 a – 652 a; *De generatione animalium* II 4, etc.

[379] Cf. *Metaph.* IX (Θ) 7, 1049 a 18–24, and above, note 214.

[380] Cf. below, p. 132–34 of the translation; *Metaph.* XII (Λ) 3, 1069 b 35 – 1070 a 3; *Physics* I 9, 192 a 25–33; *Meteorologica* IV 12, 390 a 5 sq.

[381] *Wa-bi-l-jumlati fa-yūjadu li-kulli fiʿlayni min hādhihī nisbat al-ṣūrati l-basīṭi ilā l-hayūlā l-ūlā*. The sentence is not quite clear. The question is whether to read the entire phrase *min hādhihī nisbat al-ṣūrati...* as the subject of the sentence (as proposed in my translation and interpreted by I. Mantino, fol. 376vb, "inuenietur inter omnes has duas operationes quędam proportio..."), or whether to read *nisbat al-ṣūrati...* as subject and *min hādhihī* as an apposition to *li-kulli fiʿlayn*

(as proposed by Horten, p. 106, Van den Bergh, p. 75), thus changing its meaning into 'In short, in each of these [above-mentioned correlate] pairs of actuality there is present the relation between simple form and prime matter' (Quirós' translation, p. 144, circumvents the difficulty by simply neglecting *min*). The former seems to be preferable in view of the fact that Ibn Rushd shortly before pointed to the analogical mode of relating ultimate actuality (form) and prime matter to the individual substance. The present remark would thus anticipate *Metaph.* XII (Λ) 4 (cf. also note 382). On the other hand, Ibn Rushd speaks a few lines below simply of 'this relation' *(hādhihi l-nisba)* which rather supports the latter interpretation.

[382] Of course, this is true, according to Aristotle, only of potentiality other than the potentiality of prime matter and of actuality other than the actuality of the ultimate form or entelechy. As Aristotle states repeatedly, prime matter is not distinct from pure potentiality (for a list of references cf. Bonitz, *Index Aristotelicus*, p. 785, s.v. ὕλη § 3), while actuality and entelechy are identified with εἶδος and τὸ τί ἦν εἶναι (cf. *ibid.*, p. 251a, 254a). A similar description of potentiality as 'concomitant shadow' *(ẓill muṣāḥib)* of matter is found in Ibn Rushd's Epitome of *De anima*, p. 4, l. 4 (ed. al-Ahwānī).

[383] This remark clearly alludes to Ibn Rushd's thoughts on *Metaph.* XII (Λ) 7. As explained there, the 'forms existing in pure actuality free from any admixed potentiality' mentioned here are the forms of the celestial bodies. These are free from any potentiality bound to matter or to substances compound of matter and form, with the single exception of the potentiality of locomotion (resp. of rest) which, however, is eternal, infinite and not rooted in the potentiality of matter but solely in the moving power of the prime mover; cf. *Long Commentary on the Metaphysics*, p. 1629–1639.

[384] Ibn Rushd's diction is quite careless. Of course 'genus' is not to be taken in the strict sense of the logical *terminus technicus*. As stated repeatedly, there is no genus of actuality which is predicated analogically; cf. p. 98 of the translation and note 352.

[385] A paraphrase of *Metaph.* II (α) 1, 993 b 24–26: "a thing has a quality in a higher degree than other things if in virtue of it the similar quality belongs to the other things (e.g. fire is the hottest of things; for it is the cause of the heat of all other things)" (transl. W. D. Ross).

(N.B.: The paraphrase points again to what has been assumed earlier, i.e. that Ibn Rushd relied for his Epitome at least partly on the translation by Usṭāth. In Isḥāq's translation quoted in the *Long Commentary on the Metaphysics* [p. 12, l. 12 – p. 13, l. 1] the last part of this section ['for it is the cause of the heat of all other things'] is omitted.)

[386] *Irtāḍa* c. *fī* means here 'to be well acquainted with' rather than 'to exercise o.s. in s.th.', as translated by Horten (p. 107), Quirós (p. 145), and Van den Bergh (p. 76); for *irtāḍa* c. *fī* or *bi-* in this meaning cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 256, l. 16, p. 329, l. 2, p. 373, l. 9.

[387] I.e., although this principle is self-evident, it has to be considered carefully in order that our knowledge of it reaches the state of absolute certainty *('ḥattā yaqaʿa bihi l-yaqīn')*. As the principle is not an axiom, but rather a postulate (cf. the following note), its truth can be proved. The metaphysician has to realize its fundamental truth because all truth depends on it, as Aristotle explains in the very same section, *Metaph.* II (α) 1, 993 b 26sq.: "that which causes derivative truths to be true is most true" (transl. W. D. Ross). For similar constructions with *taṣdīq* and *taṣdīq yaqīnī* governing *waqaʿa* c. *bi-* cf. Ibn Rushd, *Sharḥ al-Burhān*, p. 182, l. 6, p. 195, l. 16, p. 200, l. 21, etc.

[388] Ibn Rushd uses *ṣādara* c. *ʿalā* in the technical sense of αἰτεῖσθαι (hence, *muṣādara* = αἴτημα) borrowed from the translation of *Posterior Analytics*; cf. Ibn Rushd, *Sharḥ al-Burhān*, p. 212, l. 14, p. 214, l. 7, p. 315, l. 23, p. 316, l. 12, p. 462, l. 23, etc. Yaḥyā ibn ʿAdī, in his Commentary on *Metaph.* II (α), depicts the present principle not as postulate, but rather as an axiom *("hādhihi l-qaḍīya [...] min al-ʿulūmi l-mutaʿārifati l-wājibu qabūluhā")*, cf. *Maqālāt Yaḥyā ibn ʿAdī al-falsafiyya*, p. 231, l. 17sq. (ed. S. Khalīfāt). Needless to say, both interpretations, standing in the Euclidean tradition of how to propose axioms and postulates, imply that Aristotle laid this out *at the beginning* of the *Metaphysics*, because it is so important; cf. also notes 175 and 448.

[389] The central topic of *Metaph.* IX (Θ) 8.

[390] Cf. Chapter I, § 11, p. 48 of the translation.

[391] An exception to this common topos of early Arabic philosophy is noted by Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IV.2, p. 176sq., possibly referring to the Megarians, cf. G. C. Anawati, *La métaphysique du Shifā'*, vol. I, p. 362, note ad p. 176, 14.

[392] Cf. above, note 274.

[393] According to Aristotle's teleological conception of nature, any transition from potentiality to actuality, no matter whether by nature of by external force, is an ordered process or movement. Aristotle therefore rejects the idea of an unordered or chaotic movement of the elements prior to the existence of an ordered cosmos as unfolded in Plato's *Timaeus*; cf. *De caelo* III 2, 300 b 16 – 301 a 11, and Ibn Rushd's commentary on this section, which explicitly identifies Plato as the pre-Aristotelian philosopher referred to here, *Talkhīṣ al-Samāʾ wa-l-ʿālam*, p. 296, l. 21 sqq.

[394] Cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 19 sq., 75.

[395] The individual is potential before it is actual. However, there has to be something in actuality in it, namely its formal, efficient and final cause without which the potential cannot be actualized. Cf. *Metaph.* IX (Θ) 8, 1049 b 17–25, *Physics* VI 6.

[396] Cf. p. 134 of the translation, and *Metaph.* II (α) 2, 994 a 19 sqq.

[397] *Al-sababu l-ghāʾiyyu huwa sababu l-asbābi idh kānat tilka innamā tūjadu min ajlihī.* It is not clear whether *tilka* ('those') refers only to the other causes (as translated by Horten, p. 109, Van den Bergh, p. 77) or to all that is mentioned before, i.e. to the other causes and also to the process of change as well as the potentiality as such. I took it here in this wider sense (rendered by 'those [things]') because the point of reference is *Metaph.* IX (Θ) 8, 1050 a 8–10, which mentions becoming (γένεσις) and potentiality (δύναμις) as that which is for the sake of the aim: "For that for the sake of which a thing is, is its principle, and the becoming is for the sake of the end; and the actuality is the end, and it is for the sake of this that the potentiality is acquired" (transl. W. D. Ross). However, in his *Long Commentary* on *Metaph.* II (α) 2, 994 b 9 sq. ("the final cause is an end, and that sort of end which is not for the sake of something else, but for whose sake everything else is," transl. W. D. Ross), Ibn Rushd refers to the final cause as that for whose sake the other causes are: "He means: Furthermore, it is self-evident that there is a cause called 'end' [...], and this is what is found in a thing not for the sake of any other cause in the thing whose end it is, but rather all causes which are in that thing, I mean efficient, material, and formal [cause], are for the sake of this cause [...]," *Long Commentary on the Metaphysics*, p. 31, l. 9–13.

[398] This theorem is an important element of Ibn Rushd's theory of the atemporal eternity of the creator and his refutation of the idea that God is either simultaneously with or prior in time to the world. Temporal priority of the creator is nothing that belongs essentially to the creator, but rather an accidental phenomenon in that which is created; cf. Ibn Rushd, *Tahāfut al-tahāfut*, p. 57–69.

[399] Cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 129–131; also *Metaph.* IX (Θ) 8, 1050 b 18 sq.

[400] This seems to be an attempt at determining 'cause' in its most general sense, despite the fact that it has been conceived previously as an equivocal concept applied to any kind of beginning (ἀρχή), to the four Aristotelian causes, as well as to proximate and remote, potential and actual, internal and external causes, *Metaph.* V (Δ) 2, *Physics* II 3, above, p. 48 of the translation. Obviously, the expression 'essence of that which is caused' does not imply here that any kind of cause constitutes the essence of the individual effect, but rather refers to the essence of the effect *qua* effect. The point Ibn Rushd wishes to make is evident: it is the nature of causes to be prior to the effect, yet this priority consists essentially in nothing else than the fact of being constitutive for the effect *qua* effect and does not imply temporal priority.

[401] The same argument, in greater detail, in Ibn Rushd, *Tahāfut al-tahāfut*, p. 85–91. For Aristotle's rejection of the possibility of the existence of another world cf. *De Caelo* I 8–9; Ibn Rushd, *Talkhīṣ al-Samāʾ wa-l-ʿālam*, p. 122–125.

[402] Cf. above, p. 25 sq. of the translation.

[403] Aristotle nowhere explicitly states that potentiality does not exist separately or independent of actuality. However, this is strongly suggested by *Physics* III 2–3.

[404] The proximate point of reference of the present passage is *Metaph.* IX (Θ) 8, 1049 b 34 – 1050 a 2: "But since, of that which is coming to be, some part must have come to be, and, of that which, in general, is changing, some part must have changed (this is shown in the treatise on movement), he who is learning must, it would seem, know some part of the science" (transl. W. D. Ross). The context is, as in Ibn Rushd's Epitome, the doctrine that actuality is prior to potentiality. While this doctrine, in the preceding section of *Metaph.* IX (Θ) 8, has

been applied to actuality as condition of the actualization of potentiality, the present section seems to point out that potentiality presupposes actuality also as a condition of its existence, and evidently was read in this way by Ibn Rushd. This interpretation is corroborated by Aristotle's reference to the 'Treatise on movement', which generally refers to books V-VIII of the *Physics* (for similar references cf. W. D. Ross, *Aristotle's Metaphysics*, vol. II, p. 261), and here especially to *Phys.* VI 6. In this chapter Aristotle shows first that, according to his concept of time as an infinitely divisible continuum, whatever changes must have changed previously. He then applies this doctrine to change in terms of coming-to-be, showing that not only what has become must have been becoming previously, but also that a part of that which is actually becoming must have been coming into being previously (*Phys.* 237 b 9–13). Applied to cognition as a process of coming-to-be of knowledge, this doctrine of change raises the problem that, if the precedence of actual knowledge is a condition for the potentiality of knowing something, the learner (or potential knower) must already have acquired actual knowledge in order to actualize his potential knowledge, mentioned by Aristotle in *Metaph.* IX (Θ) 8, 1049 b 33 sq.: "And thence arose the sophistical quibble, that one who does not know a science will be doing that which is the object of the science; for he who is learning it does not know it" (transl. W. D. Ross). Ibn Rushd recognizes that this aporia is what is referred to in *An. post.* I 1, 71 a 29 as the conundrum of the *Meno*, i.e. the famous section 80 d-e of Plato's dialogue *Meno*, according to which learning is either superfluous or impossible (for a formalized presentation and discussion of Meno's argument cf. Robert Nola, Gürol Irzik, *Philosophy, Science, Education and Culture*, p. 102–109, and the literature referred to there). Aristotle's solution of the problem is based on his theory of change propounded in *Physics* VI 6: a certain part of the actual knowledge (τι τῆς ἐπιστήμης) must already exist in the learner. This 'part' consists, according to *An. post.* I 1, 71 a 28 and 71 b 6, in a general knowledge (καθόλου ἐπίσταται) or vague understanding (οἶδέ πως) of what the learner is going to learn. This solution is adopted by Ibn Rushd in his Long Commentary on *An. post.*, cf. *Sharḥ al-Burhān*, p. 177, while the *Long Commentary on the Metaphysics* points into another direction. Ibn Rushd explains there that some part of that which is coming to be must already exist *by nature (bi-l-tabʿ)* in that which is coming-to-be, and illustrates this by the incapability of the donkey to learn to play

oud. In other words, the 'part' of knowledge which must precede the potentiality of acquiring actual knowledge is conceived not as a sort of universal knowledge or knowledge in ἕξις, but rather as a sort of innate apriori knowledge; cf. *Long Commentary on the Metaphysics*, p. 1185, l. 5–10. For Ibn Rushd's sources, especially al-Fārābī, cf. Deborah L. Black, "Al-Fārābī on Meno's Paradox."

[405] Cf. *Metaph.* IX (Θ) 8, 1050 b 6–8.

[406] 'Absolute potentiality' *(al-quwwatu l-muṭlaqatu)* is the fundamental potentiality of coming-to-be and corruption inherent in all substances composed of matter and form due to the potentiality of matter. In *Tahāfut al-tahāfut* (p. 271) it is called 'potentiality of substance' *(quwwat al-jawhar)*, in the Middle Commentary on *De Caelo* it is called 'potentiality in the substance' *(quwwa fī l-jawhar)* and 'potentiality of existence and non-existence' *(quwwat al-wujūd wa-l-ʿadam)*; cf. Ibn Rushd, *Talkhīṣ al-Samāʾ wa-l-ʿālam*, p. 168 sqq., p. 183. The present terminology draws on *Metaph.* IX (Θ) 8, 1050 b 13 sqq. (τὸ δ' ἐνδεχόμενον μὴ εἶναι φθαρτόν [...] ἁπλῶς [...] ἁπλῶς δὲ τὸ κατ' οὐσίαν).

[407] Cf. *De caelo* I 12, Ibn Rushd, *Talkhīṣ al-Samāʾ wa-l-ʿālam*, p. 170–176; *Risālat al-Samāʾ wa-l-ʿālam*, p. 51–55.

[408] *Allā yakūna ḍarūriyyan* does not mean 'that there is no necessary [being]' (as translated by Quirós, p. 152, and Van den Bergh, p. 79). The argument is a reductio ad absurdum, not an ontological statement. The point of reference is Ibn Sīnā's distinction between 'necessary-by-virtue-of-itself' and 'necessary-by-virtue-of-another (yet possible in itself)'. For a more comprehensive critique of this conception cf. *Tahāfut al-tahāfut*, p. 153, 245 sq., 394 sq. (as in the present section of the Epitome, Ibn Rushd uses there the concept of 'the nature' *[ṭabīʿa* or *ḥaqīqa]* of the necessary and the possible); cf. also E. Gilson, *Being and Some Philosophers*, p. 57 sq.

[409] The present section deals with *Metaph.* IX (Θ) 8, 1050 b 11–21. The argument is incomplete, as here stated: premise [i] states that the potential does not exist of necessity. Premise [ii] states that things existing of necessity do not contain any potentiality. [iii] is a mere anti-Avicennian corollary of [ii]. What is missing in order to conclude that actuality is prior to potentiality is a term which identifies necessary existence with primary existence.

[410] For Ibn Rushd's doctrine of the eternal potentiality of change in place and direction inherent in celestial bodies as an intermediate state between the pure actuality of the first mover and the material potentiality of change in non-eternal bodies cf. *Long Commentary on the Metaphysics*, p. 1201–1206, 1629–1639, also above, note 296.

[411] Cf. *Metaph.* IX (Θ) 8, 1050 b 22–26. Ibn Rushd's *Long Commentary* on this section is extant in two versions. The Arabic version is very scant. A second version, preserved in Latin and re-translated by Bouyges (*Long Commentary on the Metaphysics*, p. 1204, l. 6* – p. 1205, l. 5*), is slightly more comprehensive. Neither of the versions makes an attempt at identifying the philosopher(s) referred to (cf. W. D. Ross, *Aristotle's Metaphysics* ad loc., and Van den Bergh, p. 217, note 80^2). As for the reason why the motion of the celestial bodies cannot come to a halt, both versions of the commentary as well as Aristotle himself refer to the specific kind of potentiality inherent in celestial bodies rather than to the fact that there is no potentiality in the first mover. Hence, the reading of ms. *H* is most likely the original reading, while the other variant readings provide attempts to compensate the omission of *ʿalā dhālika*.

[412] This is certainly not the argument proffered by Kant in the antithesis to the first antinomy, as claimed by Van den Bergh (p. 217, note 80^3). It neither proves the inconsistency of the assumption of the temporal or spatial finiteness of the world, nor is it based on any concept of time and space whatsoever. What the argument aims at is to reduce ad absurdum the assumption that there is an eternal moving cause of the world which is not always moving in actuality (the doctrine ascribed to Empedocles in *Physics* VIII 1) by showing that this assumption is unsound because the concept of non-eternal movement implies the distinction between moving-in-actuality and moving-in-potentiality which, in turn, requires a moving cause in actuality. Provided that there is nothing prior to the creator of the world, this moving cause can be none other than the eternal creator himself. Thus the concept of non-eternal movement implies an eternal moving cause in actuality which is obviously self-contradictory.

[413] In this section Ibn Rushd turns to *Metaph.* IX (Θ) 9. The present sentence draws on 1051 a 4 sq.: Ὅτι δὲ καὶ βελτίων καὶ τιμιωτέρα τῆς σπουδαίας δυνάμεως ἡ ἐνέργεια, ἐκ τῶνδε δῆλον. The problem of the

variant readings *bi-l-fiʿli* and *bi-l-faḍli* encountered in the Epitome reoccurs in the *Long Commentary*, where the first hand of the Arabic manuscript displays *mina l-quwwati l-fāḍila* for τῆς σπουδαίας δυνάμεως, while the second hand reads *mina l-quwwati l-fāʿila*. The latter reading is confirmed twice, first by the relevant lemma of Ibn Rushd's commentary, secondly by Ibn Rushd's explanation of the passage which refers likewise to the potentiality of acting *(al-fiʿl)* rather than to the potentiality of excellence or good deeds. cf. *Long Commentary on the Metaphysics*, p. 1210, l. 2, p. 1211, l. 4 sq., and Bouyges' notes ad loc.

[414] The same loose terminology occurs in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1212, l. 6. Ibn Rushd means to say that being potentially good and being potentially bad occur simultaneously because they are neutral with respect to their actualization. Hence, the potentiality for the opposites good and bad must be either good *and* bad, or neither; cf. *Metaph.* IX (Θ) 9, 1051 a 13 sq.

[415] The last thought obviously draws on *Metaph.* IX (Θ) 9, 1051 a 17–20: "Clearly, then, the bad does not exist apart from bad things; for the bad is in its nature posterior to the potentiality. And therefore we may also say that in the things which are from the beginning, i.e. in eternal things, there is nothing bad [...]." (transl. W. D. Ross). However, the train of thought is not exactly the same. Aristotle says that evil is posterior to potentiality, because it exists only in particular actualizations of the potentiality. Ibn Rushd does not say that evil is posterior, but rather that potentiality is *the* cause of evil, which points to Neoplatonic conceptions and especially to Ibn Sīnā's identification of matter and potentiality as cause of evil (cf. C. Steel, "Avicenna and Thomas Aquinas on Evil," esp. p. 178–181; S. C. Inati, "An Examination of Ibn Sīnā's Theodicy: Dissolving the Problem of Evil," esp. p. 181 sq.). Aristotle's argument results in the conclusion that eternal things cannot be bad because they are actually prior to anything bad in actuality, which does not necessarily preclude them from being somehow involved in causing evil. Yet this is exactly what Ibn Rushd's argument excludes absolutely. From the *Long Commentary* it becomes additionally clear that Ibn Rushd does not refer solely to the first mover but also to the celestial bodies, all of which are good, though in different degrees depending on whether or not they contain the (intermediate) potentiality of locomotion; cf. *Long Commentary on the Metaphysics*, p. 1213, l. 4–11.

[416] Ibn Rushd skips Aristotle's intricate consideration of potentiality and actuality in geometrical reasoning in the second half of *Metaph.* IX (Θ) 9 and moves on with truth and falsity, the topic of *Metaph.* IX (Θ) 10. The smooth transition to this topic suggests that Ibn Rushd conceived the discussion of truth and falsity as closely related to that of potentiality and actuality. This is confirmed by his introductory note to the *Long Commentary* on *Metaph.* IX (Θ) 10: "Aristotle's aim in this chapter consists in showing that actuality is more valuable than potentiality due to [the fact] that knowledge in which there is no potentiality of transition into falsehood is more valuable than [knowledge] in which there is the potentiality of possible change, so that it turns out to be false after having been true, just as eternal being is more valuable than the transient," *Long Commentary on the Metaphysics*, p. 1220, l. 7–10. The following section of the Epitome on *Metaph.* IX (Θ) 9 is quite difficult and occasionally hard to follow.

[417] The problem raised here is not addressed in *Metaph.* IX (Θ) 10 (nor in Ibn Rushd's *Long Commentary*). One might assume that it has been stimulated by the question raised by Aristotle in 1051 b 5 sq.: "when is what is called truth or falsity present, and when is it not?" (transl. W. D. Ross). However, exactly this line is omitted in both Arabic versions quoted in the *Long Commentary on the Metaphysics*, p. 1219, ll. 2 and 8. Another potential point of reference could be the question raised in 1051 b 17 sq.: "With regard to incomposites, what is being or not being, and truth and falsity?" (transl. W. D. Ross). But again, this can be ruled out because the Arabic translation, being based on a different Greek text, displays here no question at all and was not conceived by Ibn Rushd as raising any question (cf. *ibid.*, p. 1225, l. 8–12). We thus may take this aporia as Ibn Rushd's original contribution to the present chapter of book IX (Θ). It is based on the following fundamental elements of Aristotelian epistemology: *[i]* being and truth are necessarily linked or convertible (cf. *An. post.* I 2, 71 b 25; *Metaph.* IX (Θ) 10, 1051 b 1; etc.). *[ii]* True knowledge is knowledge of what is necessary, i.e. of what cannot be otherwise (cf. *An. post.* I 2, I 4). *[iii]* Demonstration depends on necessary principles (cf. *An. post.* I 6). *[iv]* Demonstrations, in the strict sense, must hold primitively and universally (cf. *An. post.* I 5). *[v]* Cognition proceeds from what is better known to us, particulars, objects of sense perception, etc., to what is less known to us (cf. *An. post.* I 2, and often). The argument may be

explained as follows: 1. According to *[i]* potential being is potentially true (and potentially false]. Hence, (A) eternal necessary truth is restricted to eternal being. 2. If (A) is true, then (B) there can be no demonstration of what is not eternal, because demonstration must hold true universally and eternally (according to *[iv]*), but no demonstration can hold eternally for what is not eternal. 3. According to *[v]*, we attain knowledge of (A) through inductive reasoning based on our knowledge of the particulars. Yet if (B) is true, then (C) there will be no way to demonstrate (A), because demonstration depends on necessary principles (according to *[iii]*). 4. Therefore, (D) there will be no true knowledge of (A) complying with condition *[ii]*.

[418] Obviously, Ibn Rushd bases the solution of the above aporia on the difficult passage *Metaph.* IX (Θ) 10, 1051 b 9–17: "If, then, some things are always combined and cannot be separated, and others are always separated and cannot be combined, while others are capable either of combination or of separation, being is being combined and one, and not being is being not combined but more than one; regarding contingent facts, then, the same opinion or the same statement comes to be false and true, and it is possible at one time to have the truth and at another to be in error; but regarding things that cannot be otherwise opinions are not at one time true and at another false, but the same opinions are always true or always false." (transl. W. D. Ross). In this passage, Aristotle distinguishes between three groups of four associated items:
(i) Being always combined—being—being one (ἓν εἶναι)—always true (or always false).
(ii) Being always separated—not being—being many (πλείω εἶναι) —always true (or always false).
(iii) Being now combined, now separated —[now being, now being not]—[being now one, now many]—sometimes true, sometimes false. In each of these quadruplets, the first part seems to be located on the ontological level, i.e. 'being-always-combined/separated', etc. refers to what exists in reality or by its essence as a composite/incomposite, etc. (in [i] and [ii] in actuality, in [iii] in potentiality). The second part, 'being/not-being', etc., refers to the correlate level of reasoning and judging, i.e. 'being' means affirmation of the combination in question (e.g., 'A *is* combined with X'), 'not being' means negation of combination ('A *is not* combined with X'), and 'now being, now being not'

(which is not made explicit by Aristotle, but certainly intended) means analogically now affirmation, now negation. What the third part is meant to state is not easy to understand. Evidently it cannot refer to the ontological level, as in Aristotle's cosmos both composites as well as simple incomposites unquestionably do exist. Rather Aristotle seems to say that being *qua* affirmation of combination is 'one' inasmuch as A and X, the combination of which is affirmed, form in thought an essential unity, whereas not-being *qua* negation of combination is 'many' inasmuch as A and X form in thought a plurality of distinct existents. This has to be kept apart from the fourth part of each quadruplet, the truth value, where (i) and (ii) are always either true or false, while (iii) is at different times true and false. Thus, Ibn Rushd's description of affirmation as combination and negation as separation refers not to the propositional or linguistic levels (on which both affirmative as well as negative judgements are combinations of terms or syntagmata of nouns and predicates; cf. *Cat.* 10 and *De an.* III 6, according to which simple concepts are neither true nor false, whereas truth and falsity occur only where there is combination of terms, either in affirmative or in negative statements), but rather to the correlation of parts one and two of the Aristotelian quadruplets. Both negation in the case of what is always separated and affirmation in the case of what is always combined are necessarily always true.

[419] The question is not whether the particular triangle exists or does not exist, or whether the triangle is divided, as suggested in the translations and explanations by Horten (p. 116) and Van den Bergh (p. 82, p. 220, note 82[5]). Rather the point is that, as far as concrete triangles are concerned, neither the combination (affirmation) of triangle and having-angles-equal-to-two-right-angles nor the separation (negation) of this are eternal combinations/separations (universal affirmations/negations), and thus are not eternally/universally true or false; cf. *An. post.* I 5, 74 a 25–29: "[E]ven if you prove of each triangle either by one or by different demonstrations that each has two right angles—separately of the equilateral and the scalene and the isosceles—you do not yet know of the triangle that it has two right angles, except in the sophistic fashion, nor do you know it of triangle universally" (transl. J. Barnes). Eternal combination requires knowing that triangle *qua* triangle and having-angles-equal-to-two-right-angles are one and the same thing, their ἓν εἶναι (in the sense explained in note 418); cf. *An. post.* I 5, 74 a 33sqq.

[420] I.e., that which is false at a given moment might be true at another. For the distinction between possible false *(kādhib mumkin)* and excluded or impossible false *(kādhib mustaḥīl)* cf. *Long Commentary on the Metaphysics*, p. 686, l. 4–12, p. 690, l. 14sqq.

[421] Cf. *An. post.* I 11.

[422] I.e., the combination is eternal and necessary not with respect to this concrete triangle or a certain species of triangles, but rather with respect to triangle primitively and universally, *qua* figure; cf. *An. post.* I 4, 73 b 25–31.

[423] I.e., while there is falsehood in that which is now in combination, now in separation in the form of 'possible falsity' (cf. note 420) due to the potentiality of change, there is no falsity in what is eternally and necessarily in combination or separation, except when humans make mistakes in reasoning and judging. This seems to be what Ibn Rushd makes out of *Metaph.* IX (Θ) 10, 1051 b 25: "For it is not possible to be in error regarding the question what a thing is, save in an accidental sense" (ἀπατηθῆναι γὰρ περὶ τὸ τί ἐστιν οὐκ ἔστιν ἀλλ' ἢ κατὰ συμβεβηκός, transl. W. D. Ross). According to the Arabic translation, this statement refers to both eternal incomposites as well as eternal composites (as most extant Greek manuscripts, the Arab translator read in the following line τὰς συνθετὰς οὐσίας, not τὰς μὴ συνθετὰς οὐσίας as to be read in most modern editions; cf. *Long Commentary on the Metaphysics*, p. 1223, l. 11sq., p. 1227, l. 14). In other words, Ibn Rushd contrasts essential necessary truth on the ontological level, i.e. the being of what is eternally in combination or separation, with accidental falsity on the level of human cognition, i.e. error. He does not follow Aristotle in associating truth in the case of what is eternally separated with the metaphor of touch (θιγεῖν, 1051 b 24) which leaves no room for error at all, only ignorance. As in the case of what is eternally combined he locates truth in this case, too, primarily on the ontological level, while falsity is not restricted to not-touching, i.e. ignorance to the exclusion of error, but rather conceived as accidental falsehood *qua* error. The reason for this lies primarily in the Arabic translation which has for τὸ μὲν θιγεῖν καὶ φάναι ἀληθές (1051 b 24) 'some of it is true not by being said' *(wa-baʿḍuhū ḥaqqun laysa bi-annahū yuqālu)* and renders the following distinction between κατάφασις and φάσις as distinction between affirmation and definition *(ḥadd)* thus transferring the

metaphor of touch and mere 'saying' of that which is eternally in separation into the realm of propositional truth.

This doctrine, merely alluded to in the Epitome, is elaborated on in the *Long Commentary*, where Ibn Rushd distinguishes between two modes of accidental error on the basis of this translation of κατάφασις καὶ φάσις. Error with respect to composites is described there as error regarding affirmation (i.e. affirmation of combination where there is separation), and this kind of error is ignorance in the state of ἕξις *(jahl ʿalā ṭarīq al-malaka)*. Error regarding incomposites, on the other hand, is privation of knowledge or of conceptualization *(ʿadam al-ʿilm, ʿadam al-taṣawwur)*. It is accidental to the incomposite because it occurs likewise on the propositional level due to the nature of definition as such *(min qibali l-ḥudūd bi-mā hiya ḥudūd)*, i.e. because definition establishes a combination where there is no combination. This kind of error is thus ignorance with respect to ἀπόφασις *(jahl ʿalā ṭarīq al-sulb)*. By relating the two types of error to ἕξις and privation Ibn Rushd keeps falsity apart from that which is eternally in separation or combination, not only by associating it exclusively with propositional truth and falsity, but also by contrasting it with the pure actuality of these things (thus taking into account *Metaph.* IX (Θ) 10, 1051 b 28: καὶ πᾶσαι εἰσὶν ἐνεργείᾳ, οὐ δυνάμει, ἐγίγνοντο γὰρ ἂν καὶ ἐφθείροντο). Cf. *Long Commentary on the Metaphysics*, p. 1226, l. 13 – p. 1228, l. 3. Since Ibn Rushd identifies that which is eternally in separation or combination with universals, this actuality of theirs consists in nothing else than being objects of (eternal) knowledge, as becomes clear from the following sentence of the Epitome.

[424] Lit. 'the potentiality for that' *(quwwatun ʿalā dhālika)*, where 'that' neither means 'to be related to the extramental world' (as suggested by Van den Bergh, p. 82) nor 'to have an existence outside the mind' (as suggested by Quirós, p. 158), but certainly refers to the preceding *'hiya maʿqūla'* (i.e. the things' becoming objects of thought), as becomes clear from the following sentence.

[425] In other words, the truth of universals is analogical truth, implying the potentiality of being practised or actualized in our knowledge of the particulars. The cause of their truth, with respect to which they are true *secundum prius et posterius*, is the truth of that which is in eternal actuality outside the mind which, in the sentence to follow, is identified with the Good (cf. Plato, *Respublica* 508d – 509a). The entire

section is misrepresented in various ways in the three previous modern translations.

[426] This sentence introduces Ibn Rushd's reflexions on *Metaph.* X (I) which discusses in his view one and many *qua* concomitants of the principles of sensible being; cf. the introduction to Chapter III, p. 74 of the translation, and notes 334 and 335. Ibn Rushd deals with the topics of the ten chapters of this book in the following order: chapters 1–4 (one and many, contrariety), 7–10 (intermediates in contrariety, contrariety in species and genus), 6 (aporia regarding the opposition of one and many), 5 (aporia regarding the opposition of small, great and equal).

[427] Cf. p. 35–41 of the translation.

[428] *Al-kalima wa-l-ḥadd* stands here, as often, for λόγος, *Metaph.* X (I) 1, 1052 a 29, b 1. For further examples cf. *Long Commentary on the Metaphysics*, p. 484, l. 2 (ad *Metaph.* V [Δ] 2, 1013 a 29), p. 538, l. 5 sq. (ad *Metaph.* V [Δ] 6, 1016 a 33), p. 851, l. 14 (ad *Metaph.* VII [Z] 7, 1033 a 1), etc.

[429] *Bi-aghshiyatihā*, lit. 'what things are wrapped in/ coated by', but not 'by their individualities' or 'by their utmost points', as in Horten (p. 119) and Van den Bergh (p. 83); cf. 'isolated by the places which encompass them' *(bi-amākinihā llatī taḥwīhā)* in the parallel section on the 'one', above p. 36. The two ways of 'sensual isolation' simply reflect the two rival accounts of place as space occupied by something and that which contains or encompasses something.

[430] In all likelihood, the following section has been revised by Ibn Rushd. The manuscript transmission splits into three branches. One branch, ms. *H*, contains presumably the first recension. The bulk of the manuscripts display an almost entirely different text, which represents for large parts the second recension, yet omits certain parts of the first recension which were supposed to be kept in the revised version. Ms. *M* and I. Mantino, finally, display a hybrid text including passages of both versions. In other words, there is no straight transmission of the second recension which thus has to be reconstructed. The below table gives in the left column the text of ms. *H*, in the right column the reconstructed text of the second recension, based on the remaining Arabic mss. and I. Mantino's translation. The corresponding sections of

the editions taken into consideration are: p. 99, l. 22 – p. 100, l. 23 ed. Quirós, p. 98, l. 12 – p. 99, l. 9 ed. Amīn, p. 113, l. 24 – p. 114, l. 12 ed. Jihāmī.

وهو الذي يقال عليه اسم الواحد بالصورة وقد يقال الواحد بمعنى حقيقي بسيط وهو الذي لا ينقسم في جنس جنس مثل اللون الابيض في الالوان والبعد الطنيني في الالحان والحرف المصوّت وغير المصوّت في الالفاظ ومثل الواحد في الكمية وهو الذي لا ينقسم فيها وكل واحد من هذه الاجناس فكما أن فيه واحداً أوّل كذلك فيه أيضاً عدد والعدد الذي في الكمية هو الذي ينظر فيه صاحب التعاليم

لكن إذا تؤمل الأمر حق التأمل ظهرت هذه القسمة للمعاني التي يقال عليها الواحد

ومن هنا يلوح أن الواحد يقال على المقولات العشر وأنه مرادف لاسم الوجود وإنما يختلفان في الجهة فقط وذلك أنه متى أخذت الماهية من جهة ما هي غير منقسمة كانت واحدة وإذا أخذت من جهة ما هي ماهية فقط سميت ذاتاً موجوداً

ومن هنا يلوح أن الواحد يقال على المقولات العشر وأنه مرادف لاسم الوجود وإنما يختلفان في الجهة فقط وذلك أنه متى أخذت الماهية من جهة ما هي غير منقسمة كانت واحدة وإذا أخذت من جهة ما هي ماهية فقط سميت ذاتاً موجوداً

وليس الواحد الذي هو مبدأ الكمية المنفصلة هو الواحد المقول بتقديم وتأخير على جميع الاجناس ولا العدد الذي في الكمية هو العدد الموجود في جنس جنس على ما سيظهر بعد وحدّ الواحد المطلق هو أن يقال فيه إنه مكيال العدد وإنه غير منقسم بنحو من الانقسامات

وإذا كان هذا كله كما قلنا فليت شعري ما هو الواحد الذي هو مبدأ العدد وأي وجود وجوده فإنه إذا تبيّن لنا ما هو تبيّنت لنا ماهية العدد إذ كان العدد إنما يحدث بتكريره

والواحد العددي هو المشار إليه في الذهن

فنقول إن الواحد في العدد هو الشيء المشار إليه في الذهن

[431] *Bi-maʿnan ḥaqīqiyyin basīṭin*. In *Metaph.* VII (Z) 17, Aristotle differentiates between predicating something of another thing, e.g. an attribute of a subject, by taking into consideration the Why, and stating or asking for the What of something in an undistinguished and simple manner, that is without keeping apart or analysing subject and attribute (the latter is τὸ ἁπλῶς λέγεσθαι, 1041 b 1). What is expressed in the latter mode of predication is called by Ibn Rushd 'absolutely simple meaning' *(maʿnan basīṭ bi-l-ḥaqīqa)*, i.e. something that has no definition and is not considered with respect to the question 'why'; cf. *Long Commentary on the Metaphysics*, p. 1012, l. 16. In *Metaph.* X (I) 2, 1053 b 24sqq., Aristotle argues against the doctrine of the one as

separate self-constituted entity by pointing out that the one in each category is always the attribute of some underlying nature. This is where Ibn Rushd's present classification comes in. Predicating 'one' of the member of an accidental category without taking into consideration its attributive character, and hence the underlying nature, is predicating an absolutely simple meaning in the sense described above. In this way we predicate 'one' of a colour (e.g. white) without taking into account that its unity is attributive to the category of quality, etc.

[432] The examples are taken from the Arabic translation of *Metaph.* X (I) 2, 1053 b 29 – 1054 a 2; cf. also *Metaph.* V (Δ) 1016 b 21 sqq. and Ibn Rushd's *Long Commentary* on both passages. For 'as the one in ... quantity' cf. *ibid.*, 1053 b 26 sq.: ὁμοίως δὲ καὶ ἐν τοῖς ποσοῖς.

[433] Cf. *Metaph.* X (I) 2, 1054 a 5–12.

[434] Cf. *Metaph.* X (I) 1, 1053 b 4–8.

[435] I.e., the point cannot be principle of number because it has position, whereas the principle of number is indivisible oneness without position; cf. *Metaph.* V (Δ) 1016 b 23–31.

[436] *Wa-hiya llatī ʿaddadnā* refers presumably to the units in each category, thus pointing out that these are countable due to the fact that they are the substrates of one or unity as such. Another possible translation, preferred by Horten (p. 121) and Quirós (p. 163), is: 'which have been enumerated' (referring to the ten categories). The phrase is omitted in the translation by Van den Bergh.

[437] In the *Long Commentary* Ibn Rushd discusses positions [i] and [ii] in the context of *Metaph.* X (I) 2, 1054 a 13 sqq., *Long Commentary on the Metaphysics*, p. 1279–1282. Position [iii] is there touched upon only briefly in the context of *Metaph.* X (I) 2, 1053 b 10 sq.

[438] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.2–3, esp. p. 106–110.

[439] I.e., if the one is accidental and extrinsic to each category and predicated of them by analogy, that by which this analogy is established must be either the fact that the categories are categories and as such related analogically to one another. But then predicating 'one' analogically would be nothing else than predicating category in analogy to category. Or else, the analogy must be established by an additional category within these categories with respect to which the one

can be predicated of all categories analogically which entails an infinite regress. Ibn Rushd refers in his *Long Commentary on the Metaphysics*, p. 1279, l. 15 sq., to the present refutation of Ibn Sīnā's position.

[440] I.e., unlike the one *qua* measure of number these can be conceived as individuals without being separated from matter. One *qua* number and one *qua* quantitative unit are distinct in this respect, and both are different from the transcategorial concept of oneness applied to them analogically.

[441] In his *Long Commentary* Ibn Rushd accuses Ibn Sīnā likewise of two errors which led to his doctrine of the one. However, only the first error adduced there has an exact correspondence in the Epitome. The second reproach is phrased differently: it is no longer based on the alleged failure to distinguish between the different relations of the transcategorial one with respect to numerical oneness and oneness of concrete quantitative individuals, but rather points to the confusion of the accidentality of veridical being (which thus is correlated with the transcategorial one) with the non-accidental, analogical predication of oneness *qua* unity in each of the ten categories: "The man [i.e. Ibn Sīnā] erred in two points: first, he thought that the one which is the principle of quantity is the one which is coextensive with the term 'being'. As a consequence, he held, instead of [conceiving] this one as being countable in the accidental [categories], that the one which signifies all categories is an accident. Secondly, he confused the term 'being' which signifies the genus with the [term 'being'] which signifies that which is true; for the latter is [indeed] an accident, while the one which signifies the genus signifies each single of the ten categories by analogical signification," *Long Commentary on the Metaphysics*, p. 1280, l. 5–11; cf. also *ibid.*, p. 1282, l. 7–12.

[442] There is no marker at the beginning of this section signalling the end of the critical notes on Ibn Sīnā and the resumption of Ibn Rushd's own reflexions. Such a transition can only be reconstructed from what follows. Furthermore, it is not clear why Ibn Rushd speaks here of *munṭaqāt* instead of measures as in the related section of his *Long Commentary* (on *Metaph.* X [I] 1, 1052 b 31 sqq.), and what he exactly means by this term. I have not been able to find evidence for this form in other works by Ibn Rushd. The proposed translation, 'conceptions' (cf. 'Begriffe' in Horten, p. 124), is based on the assumption that the

term corresponds semantically with the form *manāṭiqa* which occurs at a number of places in the *Long Commentary on the Metaphysics* in the meaning of λόγος as distinguished from ὄνομα (e.g., p. 360, l. 9, p. 362, l. 11, on *Metaph.* IV [Γ] 4, 1006 b7; p. 462, l. 12 on *Metaph.* IV [Γ] 7, 1012 a 23, etc.). In any case, the word cannot mean 'measures', as translated by I. Mantino and adopted from there by Van den Bergh and Quirós. A scribal error can be excluded as the word occurs no less than four times in the following lines. Apparently, Ibn Rushd wishes to distinguish between a primary concept of unity in itself which, as we have learnt above, exists only in the soul, and conceptions of other genera of unity *(sāʾir munṭaqāt al-ajnās al-ukhar)*. The latter conceptions are merely *posited ('bi-l-waḍʿ')* inasmuch as they are not indivisible in all respects, but rather conceived and employed as indivisible measures. The distinction thus seems to correspond to the one drawn regarding things counted and measured, between measure by nature *(miqdār/mikyāl bi-l-ṭabʿ)* and measure by position *(miqdār/mikyāl bi-l-waḍʿ')*, provided in the *Long Commentary on the Metaphysics*, p. 1252, l. 1 – p. 1253, l. 8. On the other hand, the idea of oneness as primary concept—abandoned in the *Long Commentary*—is presumably owed to Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3.

[443] Cf. *Metaph.* X (I) 1, 1053 a 1 sq.

[444] Cf. *ibid.*, 1053 a 8–12, and Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1257 sq.

[445] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3, p. 105, l. 11–14: "One is astounded by those who define number and say, 'Number is a multiplicity composed of units or of ones,' when multiplicity is the same as number—not as a genus of number—and the reality of multiplicity consists in that it is composed of units. Hence, their statement, 'Multiplicity is composed of units,' is like their saying, 'Multiplicity is multiplicity.' For multiplicity is nothing but a name for that which is composed of units," transl. M. E. Marmura, p. 80.

[446] The following argument refers to what is only implied in the preceding paraphrase of Ibn Sīnā's position (cf. note 445) and stated explicitly in the section of the *Ilāhiyyāt* which precedes the lines paraphrased. Ibn Sīnā explains there that oneness belongs to the primary concepts of intellection, while multiplicity is what is apprehended first by imagination *(takhayyul)*. Explaining numerical oneness in terms of

multiplicity is thus a mere process of directing attention to what is already known, and this should not be confused with providing a definition in the strict sense. Although the imagination of multiplicity seems to be prior to the conception of oneness this does not qualify multiplicity to serve as a genus of number in defining numerical oneness; cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3, p. 104, l. 4 – p. 105, l. 10 (transl. M. E. Marmura, p. 79sq.).

[447] I.e., Ibn Sīnā's argument is correct as far as numerical oneness and numerical multiplicity are concerned. In this case it makes no sense to employ multiplicity as genus in order to make known what numerical oneness is, since [i] the latter is prior to and better known than (the imaginative concept of) numerical multiplicity, and [ii] numerical multiplicity is not distinct from number. However, this does not hold good for the universal concepts of oneness and multiplicity as such which are, according to Ibn Rushd, prior to the concepts of numerical oneness and multiplicity. Thus, it does make sense to employ the universal a priori concept of multiplicity as a genus in order to determine numerical oneness or number.

[448] The last thought is only implicit in Ibn Sīnā who merely points out the difficulty of defining oneness and multiplicity without including either in the definition of the other, *K. al-Shifāʾ: al-Ilāhiyyāt* III.3, p. 104, l. 4–9. At the present place, Ibn Rushd uses the term *muṣādara* as an equivalent of *waḍʿ al-maṭlūb al-awwal* or petitio principii, as he does frequently in his Middle Commentary on the *Prior Analytics*; cf. *Talkhīṣ Kitāb al-qiyās*, p. 328–331, ed. Jihami (for *muṣādara* = 'postulate' cf. notes 175 and 388).

[449] Cf. p. 98sq. of the translation.

[450] *Waqafa l-qudamāʾu ... ʿalā hādhā l-maʿnā* cannot mean that the ancients *agreed upon* this meaning, as translated by Horten (p. 126) and Van den Bergh (p. 88), which not only conflicts with the meaning of the verb *waqafa* c. *ʿalā* but also with Aristotle's reports on the relevant positions of previous philosophers and Ibn Rushd's reception of such reports. Taken neutrally it means that the ancients inquired about this issue or propounded their views on it (instead of being unaware of it), stressing the contrastive aspect it can also mean that the ancients opposed to the doctrine in question.

[451] Cf. *Metaph.* X (I) 2, 1053 b 15: οἱ περὶ φύσεως, i.e. Empedocles, Anaximander, and Anaximenes.

[452] Cf. *Metaph.* X (I) 1, 1053 a 24sq.

[453] Ibn Rushd presents here a very Aristotelianized version of the doctrine of the one provided by pre-Aristotelian natural philosophers. In doing so, he follows Aristotle who unfolds in *Metaph.* III (B) 4 the eleventh aporia based on the framework of his own terminology and doctrine, then ascribes to previous natural philosophers the doctrine of predicating one and being by reference to a more intelligible one; cf. *Metaph.* III (B) 4, 1001 a 4–19.

[454] Aristotle mentions in *Metaph.* X (I) 2, 1053 b 15sq., the authoritative passage dealt with here, love (Empedocles), air (Anaximenes), and the infinite (Anaximander). In book I (A) 3, 984 a 2sqq., Aristotle mentions Thales of Miletus and Hippo having determined water as the primary principle and Hippasus and Heraclitus for the correlate doctrine on fire. However, that Ibn Rushd replaces in the present section air and love by water and fire does not disprove our previous assumption (cf. note 334) that he had no access to book I (A) of the *Metaphysics* when composing the Epitome. The doctrines attributed to Thales and Heraclitus enjoyed a wide circulation in ancient commentaries on Aristotle and doxographies (cf. the references given by W. D. Ross, *Aristotle's Metaphysics* vol. I, p. 130, to which one might add Aetius' *Placita philosophorum*). Besides, Aristotle himself referred to them in other works well known to Ibn Rushd, e.g. *De caelo* III 5, 303 b 11sqq., on water, air and fire as first cause, *Physics* III 5, 204 b 22 sqq., on water, fire, and the infinite, etc.

[455] Cf. *Metaph.* X (I) 2, 1053 b 12sq.: οἵ τε Πυθαγόρειοί ... καὶ Πλάτων ὕστερον.

[456] For the change in diction—the first sentence of the section describes innovations by Aristotle, now we are referred to what 'had already become evident' (before Aristotle)—cf. note 453.

[457] 'Cord' *(sabab)* and 'peg' *(watid)* are constituents of metres in Arabic prosody, mentioned also in Ibn Rushd's *Long Commentary* on *Metaph.* X (I) 1, 1053 a 21sq.

[458] Reading *wa-buʿd al-irkhāʾ* instead of *wa-l-buʿd al-irkhāʾ*. For this term cf. Ibn Sīnā, *K. al-Shifāʾ: al-Riyāḍiyyāt. Jawāmiʿ ʿilm al-mūsīqī*, p. 50.

[459] For these examples cf. note 432.

[460] The reference is to Chapter II, p. 53–56 of the translation, which draws on various sections of the *Metaphysics*, the *Categories* and the *Physics*.

[461] I.e., (i) Is there a first one in each genus/category predicated of all members of this genus *secundum prius et posterius*?, and (ii) Is there a separate substance which is the principle of all sensible substances?

[462] In a similar way, books VII-X of the *Metaphysics* are depicted in Ibn Rushd's *Long Commentary* as preparation *(tawṭiʾa)* and premises *(muqaddimāt)* for book XII (Λ), the central element of the 'second part of this science'; cf. *Long Commentary on the Metaphysics*, p. 745, l. 6–10; cf. also Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

[463] Ibn Rushd turns now to *Metaph.* X (I) 3.

[464] A paraphrase of *Metaph.* X (I) 3, 1054 a 20–23.

[465] After *wa-ayḍan fa-inna* the transmission of the Arabic text splits up for several lines into two branches represented by mss. *H, M,* and *Q* on the one hand, and the remaining manuscripts—partly *in textu*, partly *in margine*—on the other hand. The two branches seem to complement each other rather than to transmit two distinct versions or recensions. The original text can be reconstructed on the basis of Mantino's translation (while mistakes of the Latin edition, in turn, can be emended through the Arabic text). The above translation is based on the following text which is supposed to replace the section *"wa-ayḍan ... bi-ḍṭirārin"* in Quirós, p. 109, l. 12–16, Amīn, p. 108, l. 8–10, and Jihāmī, p. 121, l. 8–11:

وأيضاً فإن الواحد يقابل الكثرة من جهة خواصه فإن للواحد خواص وهي الهوهو في الجوهر والشبيه في الكيف والمساوي في الكمية فإن الواحد في الجوهر هوهو وفي الكيف شبيه وفي الكم مساو وللكثرة خواص مقابلة لخواص الواحد وهي الغير وغير الشبيه وغير المساوي إلا أن الذي يقابل من هذه للواحد في جهة ما هوهو هي الغيرية فإن الهوهو والغير متقابلان وذلك أن كل شيء في الجوهر باضطرار

[466] The following lines deal with *Metaph.* X (I) 3, 1054 a 30 sqq., the contraries of the properties of one and many. Having mentioned that one is opposed to many in terms of privation *vs.* having, Aristotle states that they are not opposed to each other by contradiction or relation (1054 a 23–26). In *Topics* V 6–7, these three kinds of opposition are explained as those which do not concern the specific properties (τὸ ἴδιον) of that which is opposed to each other. Only the fourth kind of opposition, contrariety, can be an opposition of the specific properties of either opposite (cf. *Topica*, 135 b 12–16). Accordingly, Ibn Rushd speaks in the present section (as in the related section of his *Long Commentary on the Metaphysics*, p. 1287, l. 2) of the opposition of one and many in terms of their specific properties *(khawāṣṣ)*.

[467] Cf. p. 41–43 of the translation.

[468] Cf. above, Chapter I, section 8[a], last third.

[469] This proviso anticipates the aporiae resulting from conceiving one and many as absolute contraries discussed in *Metaph.* X (I) 6. As will become clear from the following section the opposition of one and many is not the pure contrariety of the same and the other, but rather opposition *qua* maximum difference *(khilāf)*.

[470] I.e. this is the reason why *difference* admits more and less which, in turn, is the reason why there is a greatest and a smallest difference; cf. *Metaph.* X (I) 3, 1054 b 31 sqq. and the beginning of *Metaph.* X (I) 4.

[471] Prima facie the distinction unfolded here seems to correspond with the first two kinds of contrariety mentioned in *Metaph.* V (Δ) 10, (1) things "that differ in genus, which cannot belong at the same time to the same subject", and (2) "the most different of the things in the same genus" (1018 a 25–27, transl. W. D. Ross). Thus, 'things which are mutually other' *(al-ashyāʾu l-mutaghāyira)* would correspond to τὰ διαφερόντα κατὰ γένος, while one and many are contraries of the second type of contrariety. However, this assumption is falsified by the following lines of the Epitome which contrast contraries with different things belonging to different genera; cf. also *Metaph.* X (I) 4, 1055 a 25 sq., where (1) is explicitly excluded, "for it has been shown that there is no difference between anything and the things outside its genus" (transl. W. D. Ross). Thus it seems to be more appropriate to relate Ibn

Rushd's expression of 'things which are mutually other' by pure otherness to what Aristotle adduces in *Metaph.* V (Δ) 10 as third class of things 'other in species' (ἕτερα τῷ εἴδει), namely those which are contraries in their essence (ὅσα ἐν τῇ οὐσίᾳ ἐναντίωσιν ἔχει). This kind of contrariety of the same and the other cannot apply to the opposition of one and many, since the latter, as has been discussed above, do not exist as separate self-constituted substances, but only in some underlying nature depending on the genus to which they belong. Such an interpretation is corroborated by Ibn Rushd's use of the term 'things which are mutually other' in connection with otherness in form (*qua* species); cf. *Long Commentary on the Metaphysics*, p. 1365, l. 10–16; also applied to sensibles belonging to different species of sense perception in the Epitome of *De anima*, cf. *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 54 (ed. al-Ahwānī).

[472] This section is a summary of *Metaph.* X (I) 4, 1055 a 3–19. (It might be worth noticing that Ibn Rushd uses here the term *nihāya* ['end'] as an equivalent of τέλος. The latter occurs four times in the Greek text of the relevant section, but not even once in the Arabic translation quoted in the *Long Commentary on the Metaphysics*, p. 1300 sq.)

[473] A summary of *Metaph.* X (I) 4, 1055 a 19–23.

[474] This seems to stand in blunt contradiction to *Metaph.* X (I) 4, 1055 a 33 sqq.: "The primary contrariety is that between state and privation [...]. And the other contraries must be called so with reference to these, some because they possess these, others because they produce or tend to produce them, others because they are acquisitions or losses of these or of other contraries" (transl. W. D. Ross). However, from other sections of the *Metaphysics* and other works dealing with opposites and contraries it is clear that Aristotle does not speak of 'contraries' in the strict sense at this place, but rather refers to privation and possession as a sort of principle of opposition in general. This is also how Ibn Rushd interpreted this statement in his *Long Commentary on the Metaphysics*, p. 1310, l. 10 – p. 1311, l. 3. The argument of the first part of the present statement is thus quite simple: (i) contrariety is predicated *secundum prius et posterius* (this is how Ibn Rushd interprets *Metaph.* X [I] 4, 1055 a 35: τὰ δ' ἄλλα ἐναντία κατὰ ταῦτα λεχθήσεται); (ii) what is predicated *secundum prius et posterius* is predicated in analogy to

what is first or complete in the genus in question; (iii) what is complete in any genus is the greatest (cf. *Metaph.* X [I] 4, 1055 a 10: τό γε μέγιστον ἐν ἑκάστῳ γένει τέλειον); (iv) the greatest in contrariety is the greatest distance (cf. *Metaph.* X [I] 4, 1055 a 9: τὸ δὲ τῶν ἐσχάτων διάστημα μέγιστον, ὥστε καὶ τὸ τῶν ἐναντίων); (v) distance is a kind or attribute of place (cf. *Physics* III 5, 205 b 32, IV 1, 209 a 4, etc.); therefore (vi) the first and fundamental contrariety is contrariety (= greatest distance) in place.

However, this is not the whole story. From the end of this section it becomes clear that the doctrine of analogical predication is only a corollary of what follows. This first contrariety is not only the cause of existence for other contrarieties but also the cause for their occurrence in substances *(al-sabab fī wujūd sāʾir al-mutaḍāddāt fī l-jawhar)*. What is behind this enigmatic statement, which is hardly derivable from the doctrine of analogical predication, becomes clear from what follows: contrariety in place is the primary contrariety because spatial extension or three-dimensionality is the prerequisite for the reception of opposites in prime matter. Aristotle had shown in *Physics* I 7 and *De generatione et corruptione* II 1 that prime matter, and only prime matter, is the primary unqualified substrate of contraries (like Ibn Rushd he gives hot and cold as an example). This doctrine underwent in late antiquity significant modifications, first with respect to the question whether there are contraries prior to or independent of matter (e.g., Sameness —Otherness, Limit—Unlimited, etc. in the philosophy of Proclus), then also with respect to the question whether three-dimensional extension might be an additional prerequisite of the reception of contraries, and if so, how it is related to (prime) matter. Having discussed the latter question above, p. 89–93 of the translation, Ibn Rushd indicates here an answer to the question whether three-dimensional extension is prior to the reception of contraries in matter. Although he is very brief, we can infer from his words that prime matter alone, in his view, is not sufficient to serve as the substrate of contraries existing in substances. Since contraries (such as hot and cold) require substances in which or as the form of which they occur, it is not the entirely formless and unextended prime matter, but some sort of informed matter what serves as substrate of contraries. But matter cannot be informed, unless it is potentially three-dimensional, as explained above (p. 91 sq.). Hence, spatial extension and three-dimensionality are the immediate prerequisites of contrariety in form or substance. As soon as the potentiality of

three-dimensional extension is actualized through any form whatsoever, there are by necessity the contraries of the extremes of these dimensions, which is why the contrariety of spatial distance is the primary contrariety. Such a doctrine, which is not further elaborated in the *Long Commentary on the Metaphysics*, is apparently closely related to John Philoponus' view of three-dimensionality as common matter of the simple elements and ultimate receptacle of contraries expounded (possibly under the influence of Alexander of Aphrodisias) in his Commentary on *De generatione et corruptione*; cf. F. De Haas, *John Philoponus' New Definition of Prime Matter*, p. 104–120, 156–164.

[475] With the present section Ibn Rushd turns to *Metaph.* X (I) 7.

[476] Cf. Aristotle, *Physics* V 3, 227 a 7 sq., VI 10, 241 a 27 sq., VIII 7, 261 a 33 sq.; Ibn Rushd, *Jawāmiᶜ Kitāb al-samāᶜ al-ṭabīᶜī*, p. 72, 110, for the source of the present reference *Metaph.* X (I) 7, 1057 a 32 sq.

[477] A paraphrase of *Metaph.* X (I) 7, 1057 a 18–22. Note that the Arabic translation of 1057 a 19 quoted in the *Long Commentary on the Metaphysics* (p. 1349, l. 2 sq., p. 1350, l. 11 sq.) is based on the reading καὶ ἐνίων ἀνάγκη τῶν ἐναντίων εἶναι τὰ μεταξύ instead of καὶ ἐνίων ἔστιν [scil. τι μεταξύ], ἀνάγκη ἐκ τῶν ἐναντίων εἶναι τὰ μεταξύ.

[478] A paraphrase of *Metaph.* X (I) 7, 1057 a 22–30.

[479] This implies that not only all intermediates are compounded of contraries but that the reverse (all that is compounded of contraries must be an intermediate) is likewise true, which is exactly what Ibn Rushd states in his *Long Commentary* on *Metaph.* X (I) 7, 1057 b 26 sq., p. 1361, l. 3–6.

[480] Cf. Ibn Rushd's definition supplied in *al-Kulliyyāt fī l-ṭibb*, p. 94: "The definiton of sickness is conceivable from that of health as it is its opposite. Since health is the state of the organs in which they perform their natural active or passive functions, sickness is necessarily the state in which the organs do not perform their active or passive functions in the way they naturally do."

[481] In his *Long Commentary* on *Metaph.* X (I) 7, 1057 b26 sq., Ibn Rushd rejects Galen's position explicitly: "It is not possible that in that which is combined of contraries there exist two equal parts, but rather one of the two [parts] has to be predominant. This is the one to which

the form [of the intermediate] is attributed. This shows you that there is no [such thing] compounded of contrary extremes in the state of equilibrium as has been admitted by Galen in medicine. For if that were possible, things combined of extremes could exist by themselves without being attached to change or to having less [of one of the extremes]. We have composed a treatise on the refutation of Galen [dealing] with this issue," *Long Commentary on the Metaphysics*, p. 1361, l. 8–13. The treatise Ibn Rushd is referring to is presumably either his *Talkhīṣ* on Galen's Περὶ κράσεων or the short essay on the kinds of mixture *(Fī aṣnāf al-mizāj)*. In both treatises we find refutations of the theory that there is an intermediate state between health and sickness which draw on Aristotle's doctrine of contraries and more and less; cf. *Commentaria Averrois in Galenum*, p. 66, l. 17–23; p. 241, l. 28 – p. 242, l. 26 (the latter section supports the reading proposed for the above translation by stating that "if it is called intermediate, then because it is similar *(shabīh)* [to a true intermediate]," p. 242, l. 23). For Ibn Rushd's *Treatise on Mixture* and related works, cf. H. Eichner, *Averroes' Mittlerer Kommentar zu Aristoteles'* De generatione et corruptione, p. 144–157.

[482] Cf. *Metaph.* X (I) 7, 1057 a 33sqq.

[483] For privation and possession as a particular case of contradiction cf. *Metaph.* X (I) 4, 1055 b 2sqq., also V (Δ) 22, 1022 b 24–31, and Ibn Rushd's *Long Commentary* on these sections.

[484] Cf. p. 43 of the translation; cf. also Ibn Rushd, *Talkhīṣ Kitāb al-maqūlāt*, p. 100–104.

[485] Cf. *Metaph.* X (I) 7, 1057 a 37sq., also 6, 1056 b 35.

[486] Cf. *Metaph.* X (I) 4, 1055 a 33sq., also IX (Θ) 2, 1046 b 14, and note 474.

[487] Cf. *Metaph.* X (I) 4, 1055 b 11–19.

[488] The last sentence, which is omitted in ms. *H*, supplies a further proof for the primacy of privation and possession in opposites. It seems to draw on *Metaph.* IX (Θ) 2, 1046 b 14sq.: "[T]he contrary is the primary privation, and this is the entire removal of the positive term," (transl. W. D. Ross), yet cf. the Arabic translation quoted in *Long Commentary on the Metaphysics*, p. 1115, l. 7–9.

[489] This question is raised, in a slightly different way, by Aristotle in *Metaph.* X (I) 9, 1058 a 29/34: "One might raise the question, why woman does not differ from man in species, female and man being contrary [...]. This question is almost the same as the other, why one contrariety makes things different in species and another does not," (transl. W. D. Ross).

[490] Cf. *Metaph.* X (I) 10. The term *tābiʿ*, pl. *tawābiʿ* ('necessary concomitant'), one of Ibn Sīnā's favourite terms, but only seldom used by Ibn Rushd, corresponds here with τὰ ἐξ ἀνάγκης ὑπάρχοντα.

[491] The first type of contraries, such as transient and eternal, are *per se* (οἰκεῖα or καθ' αὑτό) attributes, the second type are accidental contraries arising from the association of form with matter (ἐν τῷ συνειλημμένῳ τῇ ὕλῃ); cf. *Metaph.* X (I) 9, 1058 a 36 – b 3, b 21–24.

[492] Van den Bergh (p. 230sq., note 96[5]) conceives the second half of this sentence as a gloss on the grounds that this has never been shown by Ibn Rushd. As a matter of fact, it is exactly what has been shown at the beginning of Ibn Rushd's discussion of *Metaph.* X (I) 3, p. 122–24 of the translation, where the specific properties or concomitants of one and many, the same—the other, like—unlike, etc. are established as principles of the different types of opposition.

[493] Aristotle discusses this question as a particular case of another problem, i.e. the question why in some cases there seem to be two opposites to one thing, although it has been established as a rule of contrariety that one thing has only one contrary. As far as one and many is concerned, this problem is raised by much (πολύ) and few (ὀλίγον) which seem to form second contraries in addition to the mutual contrariety of one and many. This particular case is treated in chapter 6 of *Metaph.* X (I). Another particular case, equal and its seeming two opposites smaller and greater, is treated in chapter 5. However, Ibn Rushd conceives the topic of chapter 6 not in the context of this problem, but rather as Aristotle's answer to the question in what way one is opposed to many. The same approach is displayed in his *Long Commentary on the Metaphysics* at the beginning of this chapter (p. 1336, l. 8–11). For this reason, Ibn Rushd makes a transition in the Epitome, having discussed chapters 1–4 of *Metaph.* X (I), immediately to chapters 7–10 aiming at completing the systematic consideration of opposites in general and contrariety in particular before turning to this ques-

tion. Apart from his efforts to present the topics of *Metaph.* X (I) in a systematic arrangement, this transposition of chapters 5 and 6 was additionally supported by Aristotle's unclear diction at the beginning of chapter 5. Instead of stating clearly that he intends to investigate the question whether the rule that one thing has only one contrary applies to one and many and to the relation of equal, great and small, he says there: "Since one thing has one contrary, we might raise the question how the one is opposed to the many and the equal to the great and the small" (transl. W. D. Ross), the first part of which Ibn Rushd took as raising the question which type of opposition applies to one and many.

[494] Cf. the Arabic translation of πρὸς τί γὰρ πολλὰ τὰ δύο εἰ μὴ πρὸς ἕν τε καὶ τὸ ὀλίγον; (1056 b 8 sq.) which connotates πρός τι (relation) with πρὸς τί: *'fa-ilā ayyi shay'in yuḍāfu l-ithnayni fa-yakūnu kathīran in lam yuḍaf ilā l-wāḥidi aw ilā l-qalīl*, Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1334, l. 9 sq.

[495] I.e., if the few and the many are related to one another in terms of plurality, the few must be a plurality. But then the one, supposing it were few, must be a plurality too; cf. *Metaph.* X (I) 6, 1056 b 11–13.

[496] This section is a summary of *Metaph.* X (I) 6, 1056 b 3–14.

[497] This position is in fact shared by Aristotle (cf. *Metaph.* X [I] 3, 1054 a 20–25; 6, 1057 a 15) and by Ibn Rushd (cf. p. 122 of the translation).

[498] Cf. *Metaph.* XII (Λ) 9, 1074 b 32 sq.: καὶ γὰρ μὴ ὁρᾶν ἔνια κρεῖττον ἢ ὁρᾶν.

[499] Cf. *Metaph.* X (I) 6, 1056 b 32–34.

[500] Aristotle compares it with the relation of knowledge and object of knowledge. The former is relative to the latter only in so far as the latter is relative to the former, but not in itself, as with essentially mutual relative terms like double and half; cf. *Metaph.* X (I) 6, 1056 b 35 sq., 1057 a 16.

[501] This sentence is difficult due to its conciseness, yet by no means self-contradictory as judged by Van den Bergh. As has been explained, the relativity of the one and the many is one-sided. The many is relative to the one not as part of a mutual essential relation, but rather in so far as there can be no many without there being one. Nevertheless the

many *qua* measurable number or quantity is also part of an essential reciprocal relation, namely with the few.

[502] This corresponds to Aristotle's résumé at the end of *Metaph.* X (I) 6.

[503] This question forms the sole topic of *Metaph.* X (I) 5. Ibn Rushd does not pay too much attention to it and ignores its systematic connection with the preceding problem; cf. note 493.

[504] I.e., the great and the small are not contraries of the equal, but rather opposed to it *qua* privation of equal. This opposition is contradictory inasmuch as one of both opposites (either equal, or great-or-small) must be true, while both together cannot be true, which is why Aristotle calls it privative negation (ἀπόφασις στερητική), *Metaph.* X (I) 5, 1056 a 24.

[505] This remark on Book α suggests that Ibn Rushd had at his disposal the commentary by Alexander of Aphrodisias already when working on the Epitome. That Book α deals primarily with the finiteness of the causes and principles (εἰ ἐπ' ἄπειρον αἱ ἀρχαὶ καὶ τὰ αἴτια) is stated in Alexander's prooemium on this book (cf. *In Aristotelis Metaphysica commentaria*, p. 137 sq., esp. p. 137, l. 9–12, 138, l. 21–23) and reiterated in Ibn Rushd's summary of Alexander's exposition of the topic of each book in the *Long Commentary on the Metaphysics*, p. 1397, l. 8–10. That it is prefixed to the remaining treatises as a kind of postulate *('ṣādara ʿalayhi Aristū...')* is based on the assumption that showing the finiteness of the causes is the task of physics rather than of metaphysics and taken for granted in the latter (cf. Alexander, *In Aristotelis Metaphysica commentaria*, p. 137, l. 12 sqq., Aristotle, *Physics* I 1–2; Ibn Rushd, *Long Commentary on the Metaphysics*, p. 22, l. 2–11); on this point cf. also C. Martini, "La tradizione araba della *Metafisica* di Aristotele Libri α – Λ," p. 83 sq.; and P. Adamson, "Yaḥyā ibn ʿAdī and Averroes on *Metaphysics* Alpha Elatton," forthcoming in *Documenti e Studi sulla Tradizione Filosofica Medievale* 21 (2010) (I wish to thank Peter Adamson for having put a preliminary version of this paper at my disposal).

[506] The reading attested in all manuscripts at my disposal (and adopted in all editions) turns the train of Ibn Rushd's argument into a petitio principii, as it is exactly the finiteness of the effects that Ibn

Rushd is going to prove here. In showing the impossibility of an infinite chain of causes Ibn Rushd follows the method displayed in *Metaph.* II (α) 2, where Aristotle treats this question in two separate trains of thought, the one *[i]* proving that there is no such chain infinite in the downward direction, the other *[ii]* proving that this is likewise impossible in the upward direction. Ibn Rushd's argument corresponding to *[ii]* begins with the words 'But if we assume an infinite [chain] of causes...' (cf. p. 132). It is thus nearly certain that he began his argument in support of *[i]* with the presupposition of a finite causal chain in the upward direction. The mistake in the manuscripts is easily explained by the close resemblance, especially in the *Maghribī* ductus with its sweeping strokes for the letter *Dāl*, of the words العلل ('causes') and العدد ('number').

[507] Ibn Rushd omits the conclusion: If there is a last effect, while the series of intermediates is finite, the chain of causes in the upward direction must be finite.

[508] Cf. Ibn Rushd, *Talkhīṣ Kitāb al-mughālaṭa*, p. 704, on Aristotle, *Sophistici elenchi* 15, 174 b 30–40. Cf. also Aristotle, *Topica* VIII 13–14.

[509] Ibn Rushd draws here on *Metaph.* II (α) 2, 994 a 22–25: "For one thing comes from another in two ways [...], (*a*) as the man comes from the boy, by the boy's changing, or (*b*) as air comes from water" (transl. W. D. Ross), where the first type is ἀλλοίωσις or μεταβολή, the second γένεσις proper.

[510] I.e. the substratum remains the same and takes on a new form (water or air) or a new accidental quality (white or black). That which is generated is 'after' that from which it is generated only in so far as the previous form or accident is replaced by the new form or accident, not in so far as the new form or accident as such is later than the previous one or generated from it. *Wa-min hāhunā fī l-ḥaqīqati hiya bi-maʿnā baʿd*, as the majority of the manuscripts read, cannot be the correct reading, first because it is exactly the opposite what Ibn Rushd explains here, secondly because the adversative continuation of the thought by *bal dhālika ʿalā maʿnā anna...* ('It rather has this meaning [only] in the sense that...') requires a preceding negation (that some sort of restriction is required was recognized by the copyist who—erroneously—inserted the word *innamā* transmitted in mss. *H* and *M*).

Thirdly, the preposition *bi-* before *maʿnā baʿd* suggests a preceding *laysa*. Finally, the proposed reading is supported by the Aristotelian text itself. In *Metaph.* II (α) 2, 994 a 22sq., Aristotle explains that in neither of the two distinct modes of coming-to-be from another thing does 'from' mean 'after' (διχῶς γὰρ γίγνεται τόδε ἐκ τοῦδε μὴ ὡς τόδε λέγεται μετὰ τόδε).

[511] Cf. *Metaph.* II (α) 2, 994 b 3. Ms. *H*, I. Mantino, and ms. *M* (in the margin), add *bi-l-dhāt*, 'per se', which is supported neither by Ibn Rushd's *Long Commentary on the Metaphysics* ad loc. (p. 28, l. 13–15), nor by the Aristotelian text or its Arabic translations.

[512] I follow I. Mantino and Quirós (p. 190) in relating *al-wujūdu lahū bi-l-fiʿl* ('exists actually') to that from which the process of change begins. Horten (p. 142) and Van den Bergh (p. 100) translate it as apposition to *kadhā* (hence: '[from which] the other thing actually comes to be') which, in my view, is untenable for reasons of syntax as well as philosophical consistency. The point of reference is the difficult sentence *Metaph.* II (α) 2, 994 a 32sq., οὐ γὰρ γίγνεται ἐκ τῆς γενέσεως τὸ γιγνόμενον ἀλλ' ⟨ὃ⟩ (Christ, Ross) ἔστι μετὰ τὴν γένεσιν (on which see W. D. Ross, *Aristotle's Metaphysics*, vol. I, p. 217sq.). The two Arabic translations transmitted in Ibn Rushd's *Long Commentary* render the sentence differently. Usṭāth's translation has "for that which comes to be does not come to be from the process of coming-to-be, but rather it comes to be only after the process of coming to be." Isḥāq's translation has "for that which will be does not come to be from what is in the process of coming-to-be, but rather that of which it is said that it will be comes to be after that which is in the process of coming-to-be," *Long Commentary on the Metaphysics*, p. 24, l. 2–4, and apparatus, l. 2. The latter translation supports the emendation by Christ and Ross, the former does not.

[513] Cf. *Metaph.* II (α) 2, 994 a 32 – b 3.

[514] I.e., prime matter, cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 16, 50.

[515] Cf. *Metaph.* II (α) 2, 994 b 9–13, and the following note.

[516] Therefore, postulating that the series of ends is infinite in such a way that the word 'end' is meaningful requires as presupposition that this series is finite; cf. also transl. Quirós, p. 191sq., note 1.

[517] 'τὸ τί ἦν εἶναι', *Metaph.* II (α) 2, 994 b 17; cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 34, l. 13 – p. 35, l. 5.

[518] Van den Bergh (p. 235 sq., note 102[1]) brackets the last part of this sentence as an ignorant later gloss. But he neglects that Ibn Rushd is not talking about form *qua* τὸ τί ἦν εἶναι, but rather about material forms.

[519] Cf. Ibn Rushd, *Risālat al-kawn wa-l-fasād*, p. 108 sq., 114 sq., also *Talkhīṣ Kitāb al-samāʾ wa-l-ʿālam*, p. 110 sq., on the finiteness of simple bodies and their forms. 'Simple parts' *(basāʾiṭ)* include here, in addition to the four elements, also the celestial bodies; similarly *ibid.*, p. 132, and ⟨*Jawāmiʿ*⟩ *Kitāb al-āthār al-ʿulwiyya*, p. 15. For *al-basāʾiṭ* = *al-usṭuqussāt al-arbaʿa* ('the four elements') cf. note 326.

[520] Cf. *Physics* I 6–7, esp. 190 b 24 – 191 a 14; Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 14 sq., *Long Commentary on the Metaphysics*, p. 1450, l. 1 sq.

[521] Cf. p. 79 of the translation, and note 275.

[522] Cf. *Physics* VIII 10; Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 119 sq., 147 sq.

[523] This question, which is not addressed in *Metaph.* II (α), leads into the heart of *Metaph.* XII (Λ) 7 and its interpretation, that is to the question whether the acting of the first unmoved mover is pure final causation or involves any other kind of causality. Systematic discussions of all four kinds of causes and their correlations are found in *Physics* II 3, and in *Metaph.* V (Δ) 2, but there the question of ultimate causes and their relationship is left out of consideration. In *De partibus animalium* I 1, 639 b 12 sqq. Aristotle argues for the explanatory priority of the final over the efficient cause and emphasizes the importance of knowing the hierarchy of the causes, but, again, he does not do this systematically for all four ultimate causes. That Ibn Rushd addresses this question here, at the end of what he calls the first part of metaphysics, shows (once more) the independence of the Epitome with respect to the Aristotelian text in terms of how metaphysics is structured, and how its tasks and questions interrelate. As explained in Ibn Rushd's introduction (cf. p. 23 sq. of the translation) it is the task of metaphysics to study the ultimate formal and final causes *(i)* because physics has investigated the ultimate material and efficient causes only,

and *(ii)* because it is by general or universal things *(umūr ʿāmma)* that we come to apprehend ultimate causes. This task has to be accomplished (relying, as far as possible, on the results established by physics) in the first part of metaphysics, which studies being *qua* sensible being and its concomitants and principles, because the four ultimate causes are the principles of sensible being, whereas the second part of metaphysics is restricted to the study of separate substances and their principles.

[524] This seems to be consistent with Aristotle's teleological model of nature. Having shown in *Physics* II 8 that material processes in nature require final causes, Aristotle explains in *Physics* II 9 that matter, *qua* hypothetical necessity (ἀνάγκη ἐξ ὑποθέσεως), is conjoined with the end of all processes of coming-to-be in a general way. For form *qua* end of matter, cf. *Physics* II 8, 199 a 30sq.

[525] *Wa-idhā*, 'cum ergo' in I. Mantino's translation (fol. 384vb); for the use of *wa-idhā* as causal conjunction in Ibn Rushd cf. Averroes, *Commentvm medivm svper libro Peri Hermeneias Aristotelis*, ed. R. Hissette, p. 113, 149 (s.v. 'cum'), 176 (s.v. 'postquam'); *Talkhīṣ Kitāb al-ʿibāra*, ed. M. Qāsim, p. 72, l. 10; *Talkhīṣ [Epitome] Kitāb al-nafs*, ed. al-Ahwānī, p. 11, l. 4, p. 42, l. 4, p. 57, ll. 4, 12, p. 97, l. 5; *Talkhīṣ Kitāb al-qiyās*, ed. J. Jihāmī, p. 181, l. 16, p. 198, l. 18; *Sharḥ al-Burhān*, p. 168, l. 3, p. 174, l. 17, p. 276, l. 7.

[526] The last part of this section dealing with the question how the ultimate efficient cause is related to the ultimate final cause is quite dense and difficult. In some cases it may admit of other interpretations, but there occur, in my view, also a number of definite errors in the three previous modern translations. For the sake of convenience I quote below the text on which my translation is based:

وأما هل يكون له سبب غائي ففيه نظر وذلك أنا متى انزلنا له سببا غائيا فهو معلول ضرورة عنه إذ كانت الغاية أشرف من الفاعل ولأنه ليس في مادة فالغاية إذاً فقط هي سبب وجوده ولأنا قد انزلنا أنه فاعل للغاية فهو إذاً لها سبب فيكون هو سببا لذاته وليس يلزم هذا في الأمور الهيولانية فإن الفاعل إنما هو سبب للغاية من جهة أنها متكونة أو في مادة وهي له سبب من جهة أنها غاية وإذا كان هذا ممتنعا فلم يبق إلا أن تكون غايته ذاته

What Ibn Rushd tries to prove, as far as I understand, is that God or the ultimate efficient cause is *not* causa sui, but rather an uncaused cause. Any distinction between final and efficient causality would imply self-causation and thus fall short of the absolute identity of the uncaused

cause or unmoved mover. This interpretation is corroborated by the *Long Commentary* on *Metaph.* XII (Λ) 6, 1072 a 13–15, where the first self-caused cause is identified with the first heaven; cf. *Long Commentary on the Metaphysics*, p. 1584sq.

[527] *Mutaqaddimata l-wujūdi ʿinda l-fāʿil* in *all* Arabic manuscripts. The translations provided by I. Mantino (fol. 384vb) and Van den Bergh (p. 103) seem to be based on the reading *mutaqaddimata l–wujūdi ʿani l-fāʿil*.

[528] A similar introduction to *Metaph.* XII (Λ) is found in Ibn Rushd's summary of Alexander's exposition in the *Long Commentary on the Metaphysics*, p. 1404, l. 12–16.

[529] According to the *Long Commentary*, the latter questions are addressed in *Metaph.* XII (Λ) 3–5; cf. *Long Commentary on the Metaphysics*, p. 1425, l. 4–6; p. 1467, l. 4–8. They pertain to what Ibn Rushd conceives as 'first part' of Book XII (Λ), namely the investigation of the principles of non-eternal substance, as opposed to the second part of this book, beginning with ch. 6, which deals with eternal substance and its principles; cf. *ibid.*, p. 1425, l. 6sqq., p. 1558, l. 9 – p. 1559, l. 5; also Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

[530] The same formula is found in the *Long Commentary*: "[T]he metaphysician is he who seeks what the principles of substance *qua* substance are and shows that the separate substance is the principle of the natural substance. But in explaining this problem, he employs as a postulate *(yuṣādiru ʿalā)* what has been explained in natural philosophy; as for the substance subject to generation and corruption, he [postulates] what has been explained in the first book of the *Physics*, namely that it is composed of form and matter; as for eternal substance, he takes over what has been explained at the end of the eighth book, namely that the mover of the eternal substance is something free from matter," *Long Commentary on the Metaphysics*, p. 1424, l. 11 – p. 1425, l. 1, transl. C. Genequand, p. 74sq. (slightly modified). This makes, in Ibn Rushd's view, the first six or seven chapters of Book XII (Λ) a metaphysical recapitulation and elaboration of what has been proved in physics, which is why, in the present work, much more attention is paid to the chapters following this section of Book XII (Λ). For Ibn Rushd's position on the question whether it is the task of physics or of metaphysics to prove the existence of the first mover, cf.

H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy*, p. 311–335; A. Bertolacci, "Avicenna and Averroes on the Proof of God's Existence and the Subject-matter of Metaphysics."

[531] Cf. Aristotle, *Physics* VIII 1.

[532] That there must be eternal motion caused by the first mover, apart from many non-eternal motions, is demonstrated by Aristotle in *Physics* VIII 6.

[533] Books XV-XIX of the Syro-Arabic *Book of Animals* comprise the five books of Aristotle's *De generatione animalium*; cf. *Dictionnaire des philosophes antiques. Supplément*, p. 329sqq. In Ch. 1 of the second book of *De generatione animalium* (the sixteenth book of this compilation), Aristotle identifies heat as the fundamental motive force of living beings (731 a 3–20). This first moving cause comes 'from outside' (τὸ πρῶτον κινῆσαν ἔξωθεν, 735 a 12sq., cf. also 737 a 7–11), its origin, according to Aristotle's *De caelo*, is the celestial sphere. In *De generatione animalium* II 6, 742 b 33–35, this principle of movement is explicitly distinguished from the first immovable principle. The reason for this distiction, briefly referred to at the present place, is that anything capable of motion that is not eternally and necessarily set in motion has in itself the potency of motion and rest. To move, it thus requires a moving cause which does not eternally cause motion. This cannot be the first eternal mover, since it requires change in that which does not eternally cause motion. This applies even to the celestial spheres which are, according to *De caelo* II, finite in power and in Ibn Rushd's view potentially at rest; cf. *Long Commentary on the Metaphysics*, p. 1629–1634, and H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God*, p. 321–335.

[534] That rectilinear motion must be finite and only circular motion can be infinite is shown in Aristotle, *Physics* VIII 8; cf. Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 149–151.

[535] Up to this point, Ibn Rushd's train of thought clearly draws on Aristotle's proof for the existence of a first mover propounded in the *Physics*. The two basic principles on which this proof builds are [i] that each moved thing has a cause of its motion (sustaining it in motion), and [ii] the impossibility of an infinite regress. This proof is slightly

different from Aristotle's argumentation in *Metaph.* XII (Λ) 6 which is based on the assumption that there must be eternal motion (proved in physics). Both trains of thought end up in identifying eternal motion with eternal circular locomotion, thus laying down the fundament of astronomy; cf. *Metaph.* XII (Λ) 6, 1071 b 11sq. In the following lines, Ibn Rushd recapitulates also the argument proffered in the *Metaphysics*. On the relation of the two proofs the one of which is a *demonstratio quia* or *dalīl*, the other a *demonstratio propter quid* or *burhān li-mā*, cf. Ibn Rushd, *Maqāla ʿalā l-maqāla al-sābiʿa wa-l-thāmina min al-Samāʿ al-ṭabīʿī li-Aristū*, p. 239sq. (English transl. from the Hebrew in H. T. Goldstein, *Averroes' Questions in Physics*, p. 25).

[536] A paraphrase of Aristotle, *Physics* VIII 1, 251 b 10–15.

[537] Cf. *ibid.*, 251 b 19–26.

[538] Cf. the end of Aristotle's consideration of Zeno's dichotomy paradox, *Physics* VIII 8, 263 b 3–6.

[539] In *Sophistical Refutations*, Aristotle distinguishes between sophistic refutations or fallacies that depend on language (παρὰ τὴν λέξιν ἔλεγχοι) and those independent of language (ἔξω τῆς λέξεως ἔλεγχοι); cf. *Sophistici elenchi* I 4–7. Ibn Rushd calls the latter 'fallacies depending on [false] conceptions' *(aghālīṭ/mawāḍiʿ mughliṭa min al-maʿānī)*. While Aristotle mentions only seven kinds of fallacies independent of language (cf. *ibid.*, 166 b 21–27), Ibn Rushd mentions that al-Fārābī added to these an eighth kind, exactly the one referred to at the present place *("wa-naḥnu najidu Abā Naṣr fī kitābihī qad zāda fī hādhihi l-mawāḍiʿi mawḍiʿan thāminan wa-huwa mawḍiʿu l-ibdāli wa-l-nuqla,"* Ibn Rushd, *Talkhīṣ Kitāb al-mughālaṭa*, p. 686, l. 9sq.). According to Ibn Rushd, this fallacy consists in replacing one concept by its *analogon (shabīhuhū)*, its concomitant *(lāḥiquhū)*, or something comparable to it *(muqārinun lahū)* which, in the present case, applies to the concepts of time and straight line. As shown by M. Rashed, "Al-Fārābī's Lost Treatise *On Changing Beings* and the Possibility of a Demonstration of the Eternity of the World," p. 33–36., this type of sophistic fallacy is discussed in detail (including the examples of time, void, and infinite body) in al-Fārābī's treatise on Aristotle's *Sophistici elenchi* and must have been incorporated in the same author's lost work *The Changeable Beings* referred to in the following sentence (cf. note 540). In Ibn Rushd's view, al-Fārābī is wrong in adducing this type of fallacy

in the context of sophistic refutations, because it is neither an essential nor a common-place fallacy, but rather a poetical or rhetorical fallacy; cf. Ibn Rushd, *Talkhīṣ Kitāb al-mughālaṭa*, p. 686, l. 11 – p. 688, l. 16, p. 730, l. 4–10. For the concept of substitution in Ibn Rushd's writings on Aristotle's *Rhetoric* and *Poetics* cf. Ibn Rushd, *Talkhīṣ Kitāb al-shiʿr*, ed. C. E. Butterworth, A. Harīdī, p. 54sq.; Ibn Rushd, *Averroës' Three Short Commentaries on Aristotle's 'Topics', 'Rhetoric,' and 'Poetics'*, ed. C. E. Butterworth, p. 132sq., note 2, and the references given there.

[540] This treatise by Abū Naṣr al-Fārābī is apparently not extant. Ibn Rushd refers to it in various works, always in the context of creation *versus* eternity/infinity of time and/or motion; cf. *Long Commentary on the Metaphysics*, p. 1498, l. 6sq.; *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 134, l. 10; *Commentarium magnum in Aristotelis Physica*, fol. 339ra (B), 345rb (D-E), 360rb (E), 424vb (M); *Maqāla ʿalā l-maqāla al-sābiʿa wa-l-thāmina min al-Samāʿ al-ṭabīʿī li-Arisṭū*, p. 231sq., 242 (English translation in Goldstein, *Averroes' Questions in Physics*, p. 18sq., p. 28). An attempt at reconstructing al-Fārābī's main arguments for the eternity of motion and infinity of time in this treatise has been provided by M. Rashed, "Al-Fārābī's Lost Treatise *On Changing Beings* and the Possibility of a Demonstration of the Eternity of the World." For testimonies of al-Fārābī's work in writings by Maimonides, Moses of Narbonne and Ibn Bājja cf., in addition to what is mentioned by M. Rashed, Ibn Rushd, *Epitome de Física*, traducción y estudio J. Puig, p. 235–237, note (148). The treatise is mentioned in Ibn Abī Uṣaybiʿa's *ʿUyūn al-anbāʾ*, but not in any of the earlier bibliographies; cf. Ḥ. ʿA. Maḥfūẓ, J. Āl Yāsīn, *Muʾallafāt al-Fārābī*, p. 25–28.

[541] That the continuity of time is bound to the continuity of motion, and that there is only one truly continuous motion, namely eternal circular motion, is shown in *Physics* VIII 8.

[542] The continuity of the eternal motion is also Aristotle's chief physical argument for the unity of the eternal mover, cf. *Physics* VIII 6, 259 a 14–19: "The following argument also makes it evident that the first mover must be something that is one and eternal. We have shown that there must always be motion. That being so, motion must be continuous, because what is always is continuous, whereas what is in suc-

cession is not continuous. But further, if motion is continuous, it is one; and it is one only if the mover and the moved are each of them one, since in the event of a thing's being moved now by one thing and now by another the whole motion will not be continuous but successive," transl. R. P. Hardie, R. K. Gaye. Again, Ibn Rushd follows this argumentation, not the alternative one provided in *Metaph.* XII (Λ) 8, 1074 a 33 sqq.; cf. also Ibn Rushd, *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 150, l. 5–17.

[543] Namely in Aristotle, *Physics* VIII 10, 266 a 25 – b 24, applied to the celestial spheres in *De caelo* II 12, 293 a 10 sqq. The point of reference in the *Metaphysics* is XII (Λ) 7, 1073 a 3–10. Ibn Rushd deals with this proof, apart from the *Long Commentary on the Physics* VIII, comm. 79, in the *Long Commentary on the Metaphysics*, p. 1633 sq., and, more comprehensively, in *Question VIII* of *Averroes' Questions in Physics*, transl. H. T. Goldstein, p. 28–33. The following proviso anticipates a counter-argument mentioned by Themistius according to which the celestial bodies, although finite *qua* bodies, may impart infinite power in so far as this infinite power is independent of their bodily finiteness and distinct from their finite bodily powers, because it either resides in their immaterial souls or depends solely on the first mover; cf. *Long Commentary on the Metaphysics*, p. 1635, l. 4 sqq.

[544] In all likelihood, Ibn Rushd refers to Aristotle, *Physics* III 5, where it is shown that infinity in magnitude is neither substance nor form or principle.

[545] The main source of this distinction and the following train of thought is not Aristotle's *Metaphysics*, but rather the Arabic treatise *On the Principles of the Cosmos (Fī Mabādiʾ al-kull)* ascribed to Alexander of Aphrodisias. Right at the beginning of this treatise, the question of the nature of the celestial body and its mover is approached by the subdivision of natural bodies capable of natural (i.e. non-forced) motion into those moving by psychic faculties and non-animated bodies moved by natural disposition or impetus *(mayl)*; cf. C. Genequand, *Alexander of Aphrodisias on the Cosmos*, p. 44, l. 4 – p. 46, l. 3. For the role of this and related treatises ascribed to Alexander of Aphrodisias in the Arabic exegetical tradition related to *Metaph.* XII (Λ) cf. *ibid.*, p. 20–26, and G. Endress, "Alexander Arabus on the First Cause: Aristotle's First Mover in an Arabic Treatise Attributed to Alexander of

Aphrodisias;" for the present distinction and its counterparts in other Alexandrian treatises *ibid.*, p. 49 sq.

[546] Cf. Ibn Sīnā, *K. al-Shifāʾ: al-Ilāhiyyāt* IX.2, p. 382, l. 8 – p. 383, l. 13 (transl. M. E. Marmura, p. 308); also *K. al-Shifāʾ: al-Ṭabīʿiyyāt I. al-Samāʿ al-ṭabīʿī*, p. 302–304, 313–319.

[547] *Mutashābih min jamīʿ al-wujūh* does not mean 'homogeneous in any relation', as translated by Horten and Van den Bergh, but rather points to the fact that this alleged impetus must be indifferent with respect to any spatial direction as opposed to the natural upward or downward inclinations of other bodies.

[548] Up to this point, hypothesis *[ii]* has been explored and defended against insufficient counter-arguments. In what follows, Ibn Rushd turns to its refutation. The three previous modern translations failed to recognize this structure.

[549] The source referred to is again [Pseudo?–]Alexander, *Fī Mabādiʾ al-kull*; Ibn Rushd paraphrases p. 46, l. 8–16 (ed. Genequand); cf. also Alexander of Aphrodisias, *Quaestiones* I 1.3.11; idem, *Traité De la providence*, ed. P. Thillet, p. 19, l. 1 sq., and Endress, *Alexander Arabus on the First Cause*, p. 53 sq. The same train of thought appears in Ibn Rushd's *Risālat al-samāʾ wa-l-ʿālam*, p. 58.

[550] Cf. Aristotle, *Metaph.* XII (Λ) 8, 1074 b 1–3.

[551] Cf. Aristotle, *De sensu et sensibili* I, 436 b 20, 'αἰσθήσεις τοῖς πορευτικοῖς σωτηρίας ἕνεκα'; cf. also Aristotle, *De anima* III 12, 434 b 22–27. For the term *salāma* cf. also Ibn Rushd, *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 68, l. 7–11. The same argument occurs in [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 48 sq., 54.

[552] Cf. Aristotle, *De anima* III 3, 428 b 11 sq.

[553] The same chain of thought is found in the *Long Commentary on the Metaphysics*, p. 1592 sq., comm. 36 ad *Metaph.* XII (Λ) 7, 1072 a 26–29.

[554] This was the general assumption to be refuted, cf. p. 141 of the translation.

[555] Strictly speaking, this proves only that the celestial body is not moved by intellectual desire for any inferior body. Drawing from this

the conclusion that its object of desire must be incorporeal requires implicitly the assumption that the celestial body is the noblest or most superior body above which there is no superior body. The argument is, thus, a petitio principii. Exactly the same train of thought is found in [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 56, l. 2–12. In the *Long Commentary on the Metaphysics*, p. 1567, l. 8sqq., the argument is explicitly ascribed to Alexander of Aphrodisias, but restricted to the former of the above-mentioned conclusions.

[556] Another argument borrowed from [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 56, l. 15 – p. 58, l. 5. Again, this proves only that there is no superior celestial body as motive cause and, by implication, that the first mover is not a celestial body, but not that it is not body.

[557] Cf. Aristotle, *Metaph.* XII (Λ) 7, 1072 b 15–20.

[558] Cf. Ibn Rushd, *Risālat al-samāʾ wa-l-ʿālam*, p. 29; *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, pp. 138–140. Its psychic motion and its natural motion are not distinct as in other living beings, cf. *Talkhīṣ al-samāʾ wa-l-ʿālam*, pp. 189sq. The same argument in [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 50, l. 5 – p. 54, l. 15.

[559] At this point, Ibn Rushd's treatment of *Metaph.* XII (Λ) 1–7 ends. As we have seen, chapters 1–5 of this book are touched upon only very concisely, while chapters 6–7 are dealt with on the basis of Aristotle's *Physics* VIII and the treatise *Fī Mabādiʾ al-kull* attributed to Alexander of Aphrodisias. The entire remaining part of the present chapter of the Epitome is devoted to chapters 8–10 of *Metaph.* XII (Λ) and is set apart by an introduction in its own right. The same tripartite conception of Book XII (Λ) and of how its parts are related to physics is found in the *Long Commentary on the Metaphysics*. Ibn Rushd explains there: "Since this science [of metaphysics] proceeds by considering the principles of substance *qua* substance, no matter whether eternal or non-eternal, [Aristotle] begins in this treatise [i.e. XII (Λ)] with [i] the principles of non-eternal substance, and mentions what has been shown about them in physics and in the preceding treatises, while the method of their consideration is peculiar to this science. [ii] Then, after this, he begins to show the principles of eternal substance. And [here] again he *posits (waḍaʿa)* what has been shown about this in physics, and considers it in the way peculiar to this science [of metaphysics], for instance [by considering it] as being substance and first form and first

end. [iii] Then, he considers [the following questions] regarding this immovable substance: Is it one or many? If they are many, what is the one to which they ascend? How is this plurality ordered with respect to it?" *Long Commentary on the Metaphysics*, p. 1425, l. 6–15, where section [i] corresponds with ch. 1–5, [ii] with ch. 6–7, and [iii] with ch. 8–10 of *Metaph.* XII (Λ). Cf. also Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

[560] Cf. Aristotle, *Metaph.* XII (Λ) 8, 1073 a 14sq.: "We must not ignore the question whether we have to suppose one such substance or more than one, and if the latter, how many," transl. W. D. Ross.

[561] This concerns especially the question how the animated eternal substances think and whether they know particular sensible substances which, according to Ibn Rushd's interpretation, is the major question of *Metaph.* XII (Λ) 9.

[562] This is what Ibn Rushd considers to be the main topic of *Metaph.* XII (Λ) 10. Cf. the first commentary on this chapter in the *Long Commentary on the Metaphysics* (p. 1710, l. 3–6) according to which this chapter inquires "whether the things which exist are because of one another and all because of the first, like the limbs of man with regard to the first principle, by virtue of which it becomes a man, or whether there is no link between them and they only exist next to one another by chance and all because of something outside them", transl. C. Genequand, p. 198. Cf. also the list of questions prefixed to the treatise *Fī Mabādiʾ al-kull* attributed to Alexander of Aphrodisias, and G. Endress, "Alexander Arabus on the First Cause," p. 41.

[563] For a parallel to this parentheses, cf. *Long Commentary on the Metaphysics*, p. 319, l. 11–16: "The first [part of metaphysics] considers separate substance, I mean, not the first [part] in teaching, but rather the first in existence. Its second [part] is the one which considers sensible substance, and this by taking into account the first in existence. The first in knowledge is sensible substance [...], while the consideration of the separate substance is the last in knowledge, but the first in existence."

[564] Having dealt with Book XII (Λ) 1–7 as a sort of recapitulation of physical doctrines required as postulates of what follows, Ibn Rushd thus reduces the metaphysical doctrines proper to be found XII (Λ) to

ch. 8–10 of this book. Cf. also above, note 530, and Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*."

[565] Cf. above, p. 139 of the translation and note 533.

[566] According to Ibn Rushd, the celestial body acts on the sublunar world by its form and specific matter together. This kind of acting is finite and distinct from its infinite continuous motion which depends on the first mover. The first mover is form of the celestial body, but form only *qua* infinite continuous motion, not *qua* material form or form in matter. The substrate of the moving force of the celestial body are the simple bodies or elements. However, the celestial body is not a composite of form and substrate like the transient composites of matter and form, but rather a body without substrate *(jirm lā mawḍūʿa lahū)*. That the substrate on which it acts as motive force is disposed for receiving this force depends solely on the first mover. Cf. *Talkhīṣ al-samāʾ wa-l-ʿālam*, pp. 177–184, *Long Commentary on the Physics* VIII, comm. 79.

[567] Cf. Ibn Rushd, *Talkhīṣ al-samāʾ wa-l-ʿālam*, pp. 77–83, on Aristotle, *De caelo* I 3–4.

[568] A paraphrase of *Metaph.* XII (Λ) 8, 1073 b 3–5.

[569] Cf. *ibid.*, 1074 a 16sq.

[570] For the role of generally accepted premises *(muqaddimāt mashhūra)* in empirical sciences cf. Ibn Rushd, *Talkhīṣ Kitāb al-jadal*, p. 509sq., 515sq.; *Sharḥ al-Burhān*, pp. 420–422.

[571] This number corresponds neither to the Ptolemaic model nor to the result reached by Aristotle, who estimates the number of spheres and their correlate movers at fifty-five; cf. *Metaph.* XII (Λ) 8, 1074 a 10sq. The present statement and the following explanation are important inasmuch as Ibn Rushd restricts himself in the *Long Commentary on the Metaphysics*, p. 1676sq., 1679sq., and in his *Commentum magnum super libro De celo et mundo Aristotelis* II, comm. 62, to summarizing and explaining the theories of the number of celestial motions provided by Aristotle and Ptolemy. However, what is depicted here as the consensus of contemporary astronomers is likewise not quite in accord with Ibn Rushd's own position, as becomes clear below.

[572] In the latter case, one has to suppose at least one further motion, in order to explain the sun's changing speed at the apogee and perigee, cf. *Long Commentary on the Metaphysics*, p. 1680, l. 3. Already Hipparchus accounted for this fact by assuming an eccentric orbit (followed in this by Ptolemy), cf. H. Thurston, *Early Astronomy*, p. 128–131, 141 sqq. For planetary models including eccentrics and epicycles *(tadwīr)* in Arabic astronomy, cf. G. Saliba, *A History of Arabic Astronomy. Planetary Theories during the Golden Age of Islam*, p. 22–26; cf. also below, note 587. (N.B.: a further motion of the sun, its rotation, was explicitly rejected by Ibn Rushd, cf. *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 237, as well as by Aristotle, *De caelo* II 7, 289 a 14–23.)

[573] The total of these motions is thirty-seven. The thirty-eighth celestial motion, in Ibn Rushd's calculation, must be that of the zodiac, caused by the precession of the celestial pole. The existence of the zodiacal sphere was disputed among Arab astronomers; cf. M. Ullmann, *Die Natur- und Geheimwissenschaften im Islam*, p. 347. Although Ibn Rushd expresses severe doubts about the existence of the 'ninth sphere' (see the immediately following section), he seems to keep to this number (i.e. thirty-eight) of celestial motions.

[574] For the astronomical doctrines of Ibrahīm b. Yaḥyā al-Naqqāsh b. al-Zarqāla (d. 480/1087 or 493/1100, known also by his Latinized name Arzachel or Azarquiel) cf. J. M. Millás Vallicrosa, *Estudios sobre Azarquiel*; G. J. Toomer, "The Solar Theory of az-Zarqāl: A History of Errors," and idem, "The Solar Theory of az-Zarqāl: An Epilogue." The transliteration of the name given in the translation follows mss. *H* and *M* (الزرقالة) which is confirmed by I. Mantino *(Alzarcala)*. The remaining mss. read *al-Zarqāl*. For the theory of the oscillating accession and recession *(iqbāl wa-idbār)* of the equinoxes, the so-called motion of 'trepidation', in early Arabic astronomy cf. J. Ragep, "Al-Battani, Cosmology, and the Early History of Trepidation in Islam."

[575] Due to the motion of precession, the positions of solstice and equinox relative to the stars change. It takes another twenty minutes or so (the sidereal year), until the sun reaches the position on the ecliptic it occupied one tropical year before. This phenomenon has been known since Hipparchus.

[576] The former is the position of Hipparchus, the latter that of Eudoxus, who did not know about precession as such, but rather tried to

cope with irregularities of the velocity of the sun's motion along the ecliptic.

[577] This may be a reference to the work of al-Battānī; cf. Van den Bergh's translation, p. 245, note 113[2].

[578] Cf. Ibn Rushd, *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 245–249, on *De caelo* II 12. For Ibn Rushd's rejection of a ninth, starless sphere cf. also G. Endress, "Averroes' *De Caelo*. Ibn Rushd's Cosmology in His Commentaries on Aristotle's *On the Heavens*," p. 43 sq.

[579] The argument draws on Aristotle, *Metaph.* XII (Λ) 8, 1073 a 23–31, but replaces Aristotle's ἕνεκα and τέλος by the concept of desire. The equation of the moving cause of the sphere and the peculiar object of desire *(mutashawwaq)* is also found in [Pseudo?–] Alexander's *Fī Mabādiʾ al-kull*, p. 82, l. 5 sq., p. 88, l. 1, p. 94, l. 10–12; for a different interpretation cf. G. Endress, "Alexander Arabus on the First Cause," p. 46.

[580] All celestial bodies except the sun perform more than one motion, as stated above. This raises the question whether the overall diurnal motion of the seven spheres below the sphere of the fixed stars, which is moved by the first mover, requires additionally a kind of diurnal mover (plus corresponding sphere). If that is the case, the number of movers increases from thirty-eight to forty-five. Aristotle is not explicit about this question. However, Ibn Rushd may be right in ascribing to Aristotle such a position, for Aristotle assumes [i] in *Physics* VIII 6 (259 b 28–31) as well as in *Metaph.* XII 8 (1074 a 31–38) a plurality of sphere-movers, [ii] a numerical correspondence between celestial motions/spheres and their principles (*ibid.*, 1074 a 15 sq.); and [iii] he excludes that movement is for the sake of itself or of another movement (*ibid.*, 1074 a 26 sq.). Hence, the diurnal motion cannot be for the sake of itself or due to the movement of another, e.g. the proximate higher, sphere. If it is distinct from the various orbital and epicyclical motions of the celestial bodies, it seems to require its own sphere and mover.

[581] Cf. [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 86–94, also sections 12 and 13 of the treatise *On the First Cause, and the Causatum and Its Movement*, likewise attributed to Alexander of Aphrodisias, edited in G. Endress, "Alexander Arabus on the First Cause," p. 62 sqq.

Alexander's position is quoted and discussed by Ibn Sīnā in *al-Shifāʾ: al-Ilāhiyyāt* IX.2, 392, l. 17sqq. (corresponding with *al-Mabdaʾ wa-l-maʿād*, p. 62, l. 5sqq., and *al-Najāt*, p. 266, l. 19sqq. [al-Kurdī] / p. 635, l. 6sqq. [Dānish-Pažūh]). For Ibn Sīnā's discussion cf. G. Endress, "Alexander Arabus on the First Cause," p. 58–61.

[582] This concerns not only the contradictory positions of different philosophers but also problematic and often vague propositions by Aristotle himself, who speaks sometimes of the unity of the unmoved mover, and at other times of the possibility or probability of a multiplicity of unmoved movers; for an introduction to the problem and its reception in Ibn Sīnā and Ibn Rushd cf. H. A. Wolfson, "The Plurality of Immovable Movers in Aristotle and Averroës." The relevant Aristotelian texts are studied by B. Manuwald, *Studien zum unbewegten Beweger in der Naturphilosophie des Aristoteles*.

[583] Aristotle considers whether the motion caused by the individual sphere-movers is a kind of accidental motion in *Physics* VIII 6, 259 b 28–31, but not in *Metaph.* XII (Λ).

[584] On the fiery sphere and its contiguity with the embracing lunar sphere cf. Aristotle, *De caelo* II 4, 287 a 30sqq., Ibn Rushd, *Risālat al-samāʾ wa-l-ʿālam*, p. 34sq.

[585] This attempt at solving the conundrum is clearly distinct from the solution offered in the *Long Commentary on the Metaphysics*. In the latter work, Ibn Rushd explains the difference between the one overall diurnal motion and the individual spherical motions in terms of priority and posteriority in nobility and substance *(bi-l-sharaf wa-l-jawhar)* of the different spheres in question, which in turn is based on priority in position, magnitude and velocity of motion; cf. *Long Commentary on the Metaphysics*, p. 1646sq., and H. A. Wolfson, "The Plurality of Immovable Movers," p. 244–251. The present solution, on the other hand, is based on the distinction between accidental (relative) motions of the parts of a whole and the essential (absolute) and uniform motion of the whole. As a byproduct, this solution provides an explanation for the irregularities of many of the planetary motions. *Qua* relative accidental motions, such motions are not necessarily bound to the centre of the motion of the whole but may have eccentric orbits (similar to the 'eccentricity' of the limbs of the moving living being).

[586] This does not mean that their orbits can dispense absolutely with any centre, as interpreted in the previous modern translations; cf. the preceding note and the immediately following section of the Epitome.

[587] The rationale for this doctrine is complex. First, it was a physical impossibility for Aristotle to assume a void or vacuum between the spheres. Besides, it would be difficult to maintain the idea of the sphere-movers as accidental partial moving causes of an essentially moved whole, if the moving parts are discrete and do not form a continuous whole. According to Aristotle, it is the fifth element or celestial ether what guarantees the continuous contact of the celestial spheres and bodies; cf. *De caelo* II 7–8. At the present place, Ibn Rushd speaks about bodies between the planetary spheres. A few lines below, he refers to these bodies as those on which the planets perform their daily motion *("ʿalā hādhihi l-ajsāmi tataḥarraku l-kawākibu l-ḥarakata l-yawmiyya")*, which points to the assumption that both the spheres and the space between them are made of or filled with one and the same type of matter or bodies (this position was adopted by Albertus Magnus who refers to Thābit ibn Qurra as his source; cf. E. Grant, *Planets, Stars, and Orbs. The Medieval Cosmos, 1200–1687*, p. 293–296; also M. Rashed, "Thābit ibn Qurra, la *Physique* d'Aristote et le meilleur des mondes," p. 709). However, it is not only Aristotle's rejection of the void and the theory of the continuity of motion that led Ibn Rushd to this doctrine. From what follows it becomes clear that the assumption of matter or bodies intervening between the planetary spheres serves also as a key for the explanation of the discrepancy between the overall daily motion from east to west and the individual motions of the stars. According to the principle that no sphere could move with multiple motions, one way to take account of this discrepancy consisted in the assumption of an additional ninth sphere. Ibn Rushd who, as we have seen above, did not like this solution, offers another solution by ascribing the diurnal motion to the eighth sphere of the fixed stars and the said bodies between the planetary spheres together. Furthermore, it is worth noticing that Ibn Rushd, at the present place, despite rejecting the epicycle theory (cf. above, note 572), seems to accept the doctrine of eccentric planetary orbits, a doctrine he vehemently opposed in his later commentaries; cf. *Long Commentary on De caelo* II 6, comm. 35, etc., *Long Commentary on the Metaphysics*, p. 1661 sq. For the discussion of this doctrine in the philosophy of Maimonides and Ibn Tibbon, cf. C.

Fraenkel, "Maimonides, Averroes, and Samuel Ibn Tibbon on a *Skandalon* of Medieval Science," and the literature referred to there.

[588] The first question seems to point to the last section of *De caelo* II 12 (293 a 4sqq.) which is discussed in Ibn Rushd's *Risālat al-samāʾ wa-l-ʿālam*, p. 73–75, and *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 243–251. The second question is, as far as I see, not addressed in *De caelo*, nor in any of Ibn Rushd's works dealing with this text (cf. also Van den Bergh's translation, p. 248, note 115[2]). Provided the reading of mss. *M, P*, and I. Mantino is the correct one, Ibn Rushd points here to the problem of how, in a model of continuous spheres of diurnal motion, the motion of the spheres could be prevented from interfering with one another, since not all planets always move in the direction of the diurnal motion, in which case their spheres may prevent the diurnal motion from being carried down from the outermost sphere to the lowest sphere. Aristotle was aware of this problem and attempted a mechanical solution by postulating twenty-two counteracting spheres each of which cancels out the motions of all but the first sphere, in *Metaph.* XII (Λ) 8, 1073 b 38 – 1074 a 5, discussed in D. R. Dicks, *Early Greek Astronomy to Aristotle*, p. 200–202. Ibn Rushd accepts this idea as a hypothesis which fits in the overall system of theory and observation in the *Long Commentary on the Metaphysics*, p. 1672–1675.

[589] This is the position anticipated by al-Fārābī and developed by Ibn Sīnā, cf. especially *al-Shifāʾ: al-Ilāhiyyāt* IX.3, p. 401, l. 1–4, 9–12: "This, then, is the meaning of the saying of the Ancients that the whole has one mover that is the object of love and that each sphere has a particular mover and a particular object of love. Therefore, each of the spheres would have a soul imparting motion that intellectually apprehends the good. [...] What the [sphere] had intellectually apprehended of the First and what it apprehends of the principle proper and proximate to it become the principle of its desire to be in motion. [...] Thus, the number of the separate intellects after the First Principle would be the same as the number of movements. But if, in the case of the spheres of the wanderers, the principle of the movement of the sphere of each star therein is a power emanating from the stars, then it would not be unlikely that the separate [intellects] would have the same number as the number of [these] stars—not the number of the spheres—and their number would be ten, after the First.", transl. M. E. Marmura, p. 325 (slightly modified).

[590] The same argument, attributed to Aristotle, occurs in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1648, l. 4–8.

[591] The present distinction between primary and secondary purposes or intentions *(al-qaṣd al-awwal/al-thānī)* of the activities of celestial bodies takes into account the relevant doctrine by Ibn Sīnā, briefly indicated in *al-Shifāʾ: al-Ilāhiyyāt* IX.2 and fully presented in *al-Ilāhiyyāt* IX.3. Ibn Sīnā distinguishes there between first and second intentions of the motions of the celestial bodies. Roughly speaking, the first intention is directed upwards and consists in imitating the essence of the first cause in order to become a self-sufficient essence, while the second intention is directed downwards and consists in imitating the essence of the first cause in its consequences, that is inasmuch as existence and good things emanate from the first cause. The two kinds of activities of the celestial bodies produce different motions, the former perpetual circular motion, the latter movement toward particular positions, in varying directions and with differences in velocity; cf. *al-Shifāʾ: al-Ilāhiyyāt*, p. 390–398. (In the philosophical literature before Ibn Sīnā, the distinction between primary and secondary heavenly intentions occurs in the context of divine creation, e.g. Ikhwān al-Ṣafāʾ, *Rasāʾil Ikhwān al-Ṣafāʾ wa-Khillān al-Wafāʾ*, vol. 3, p. 476–79, etc.) Ibn Rushd's point is that even if the celestial bodies existed only for the sake of motions performed by second intention, which are according to Ibn Sīnā not for the sake of the celestial bodies and their perfection, but rather for the sake of a perfection external to them (*"kamāl khārij ʿanhā,"* Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.3, p. 398), at least this activity must be present in them, lest nature act in vain. The same argument occurs in Ibn Rushd's *Tahāfut al-tahāfut*, p. 484sq. The basics of this doctrine are found in Alexander of Aphrodisias; cf. Genequand's commentary in [Pseudo?–] Alexander, *Fī Mabādiʾ al-kull*, p. 150, and the references given there.

[592] According to Aristotle, psychology "contributes greatly to the advance of truth in general, and, above all, to our understanding of nature", *De anima* I 1, 402 a 4–6. For Ibn Rushd it provides principles of metaphysics by establishing that there are separate forms and that these forms are separate intellects, to be identified with the movers of the celestial spheres. All this is 'necessary' (cf. Ibn Rushd's *Long Commentary on De anima* III, comm. 5, p. 410) for the science of metaphysics. The relevant sections of Ibn Rushd's *Long Commentaries* on

De anima and the *Metaphysics* dealing with the epistemological relation of psychology and metaphysics have been gathered and discussed by R. C. Taylor, "Averroes on Psychology and the Principles of Metaphysics;" idem, "Separate Material Intellect in Averroes' Mature Philosophy," esp. p. 304–309.

[593] For this pseudo-*ḥadīth* and the topos of *gnôthi seauton* in Islamic tradition cf. F. Rosenthal, *Knowledge Triumphant*, p. 137 sq.; M. M. Sharif, *Self-realization in the Domain of Islamic Gnosis*; for its connection with Aristotelian psychology also Arnzen, *Aristoteles' De Anima*, p. 195, 361–363.

[594] The equation of separate intellectual forms and separate intellects implicit in the present train of thought is deduced at length in Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1600–1603; cf. also R. C. Taylor, "Averroes on Psychology and the Principles of Metaphysics," p. 519–521.

[595] The model for this concept of the celestial bodies as intellects moving the spheres through desire aroused by intellectual conceptualization is found, not in Aristotle, but rather in [Pseudo?–]Alexander's *Fī Mabādiʾ al-kull*, as has been shown by G. Endress, "Averroes' *De Caelo.* Ibn Rushd's Cosmology in His Commentaries on Aristotle's *On the Heavens*," p. 28–30. Cf. also [Pseudo?–]Alexander, *Fī Mabādiʾ al-kull*, p. 94, l. 9 – p. 98, l. 16.

[596] I.e., a *demonstratio quia* and a *demonstratio propter quid* in the Latin terminology (cf. I. Mantino, fol. 388va). Prima facie, this remark refers to the concept of celestial bodies *qua* intellects. However, since the 'cause' adduced, i.e. desire aroused by intellectual conceptualization, presupposes the object of desire, one might ask whether Ibn Rushd intends implicitly to state that the present train of thought is a *demonstratio quia et propter quid* of the existence of this object of desire, i.e. God, thus establishing another 'physical' proof of God's existence, not *qua* final cause, but *qua* efficient mover. Cf. also D. B. Twetten, "Averroes on the Prime Mover Proved in the Physics," esp. p. 133 sq. On the other hand, Van den Bergh (p. 251, note 117^4) may be right in seeing the present remark as an interpolated gloss.

[597] Cf. above, p. 142 of the translation, and notes 551, 552. For Ibn Rushd's rejection of the Neoplatonic doctrine of celestial souls having

sense perception and imagination and its reception in Ibn Sīnā cf. G. Endress, "Averroes' *De Caelo.* Ibn Rushd's Cosmology in His Commentaries on Aristotle's *On the Heavens*," p. 30–33. For the reception of this doctrine in the context of Aristotelian psychology cf. also Arnzen, *Aristoteles' De Anima*, p. 347–351, 460–463.

[598] Cf. Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.2, p. 391; *al-Najāt*, p. 241 (al-Kurdī)/p. 580 sq. (Dānish-Pažūh).

[599] Cf. note 233.

[600] A summary of [Pseudo?–]Alexander, *Fī Mabādiʾ al-kull*, p. 82, l. 3–16.

[601] Thus, Ibn Rushd follows Ibn Sīnā's basic distinction between motions of the celestial bodies by first and by second intentions (cf. note 591), yet associates both kinds of motion with intellectual conceptualization instead of relating motion by first intention to the intellect and motion by second intention to the faculty of imagination.

[602] Cf. Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.2, p. 390, l. 5–16 (transl. M. E. Marmura, p. 315).

[603] This is how acting by choice and will in the human intellect is distinct from acting by choice and will, i.e. motion by the second intention, in the celestial active intellect and the celestial movers in general. Cf. Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.2, p. 388, l. 6 – p. 389, l. 3 (transl. M. E. Marmura, p. 313). The idea is only briefly touched upon like a reading note from Ibn Sīnā.

[604] In other works, Ibn Rushd considers four criteria for the determination of the nobility *(sharaf)* of the movers: (1) position *(waḍʿ)*, (2) size *(ʿiẓam)* of the sphere, (3) number of the stars of the sphere, (4) velocity in motion *(surʿat al-ḥaraka)*. A fifth criterion, the number of motions performed by the stars of each sphere, is considered in the commentaries on *De caelo*, but in view of its irreconcilability with the other criteria either reduced to a criterion of virtue (*faḍīla*, i.e. the good effect of celestial movers on the sublunar world, as distinct from nobility in general) or discarded as an impracticable criterion; cf. *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 245–248; *Long Commentary on De caelo* II 12, comm. 62; cf. also p. 165, footnote *(a)*. The *Long Commentary on the Metaphysics* refers to the first mover as being prior in nobility with

respect to all four criteria (cf. p. 1646, l. 16 – p. 1647, l. 3). However, with respect to the order of all spheres in their entirety, the criteria can be reduced to a single one. First, criterion (2) can be reduced to (1), as all spheres are nested within each other in the order of their size. Secondly, only the outermost sphere contains more than one celestial body. Hence, criterion (3) is impracticable for the purpose of establishing a hierarchy of the planetary spheres. Thirdly, criterion (4) does not work for both the first mover and the movers of the subsequent spheres, as the order of velocity in the seven planetary spheres is turned upside down (cf. *Long Commentary on the Metaphysics*, p. 1647, l. 3–11.). Ibn Rushd, thus, comes to the conclusion that criterion (1) is 'presumably the most appropriate' one *(laʿalla l-akhlaq)* for the task in question; cf. *ibid.*, p. 1648, l. 2sq. Cf. also F. J. Carmody, "The Planetary Theory of Ibn Rushd," p. 573–575. The idea of a hierarchical order of the celestial movers in terms of nobility traces back to Alexander Arabus; cf. *Fī Mabādiʾ al-kull*, p. 56, p. 90–92. For its reception in Latin philosophy cf. E. Grant, *Planets, Stars, and Orbs*, p. 220–235.

[605] I.e., that their velocity is not proportionate to the size of their sphere; cf. the preceding note.

[606] Unlike Ibn Sīnā, Ibn Rushd conceives the celestial movers as pertaining to *one* species. This agreement in species does not apply to them univocally, but rather *per prius et posterius*; cf. *Long Commentary on De caelo* II 8, comm. 49; *Risālat al-samāʾ wa-l-ʿālam*, p. 59. In what follows, Ibn Rushd applies to this conception the rule according to which, in focal or *pros-hen* relations, the first in any order is the cause of all that is in the order. In doing so, he tries to replace Ibn Sīnā's conception of emanative causality through causality in substance; cf. H. A. Wolfson, "The Plurality of Immovable Movers in Aristotle and Averroes," p. 244–248. The question whether many celestial movers can be distinct in species is also addressed by [Pseudo?–]Alexander in the context of the overall question whether there can be a multiplicity of movers at all, *Fī Mabādiʾ al-kull*, p. 86, l. 16 – p. 88, l. 17. In this context, [Pseudo?–]Alexander considers also the possibility that the movers differ from one another according to priority and posteriority or more and less, but nowhere elaborates on this idea in terms of *pros-hen* or one-over-many relations. However, in the parallel section of the second [Pseudo?–]Alexander text on this topic, *On the First Cause and the Causatum and Its Movement*, the concept of priority and posteri-

ority is exactly replaced by that of nobility and inferiority; cf. G. Endress, "Alexander Arabus on the First Cause," p. 69, l. 8 – p. 70, l. 11. 'Priority' is here taken in the sense of 'more honorable' (as prefigured by Aristotle, *Cat.* 12, 14 b 7sq.), which may have paved the way for a conception of the diversity of the celestial movers within one species as diversity in nobility according to prior and posterior.

[607] The latter being the object of intellectual desire of the celestial movers and the object of its self-thinking activity.

[608] Cf. Ibn Rushd, *Talkhīṣ Kitāb al-ʿibāra*, p. 88, l. 15 – p. 89, l. 2: "The existence of the general *(al-ʿāmm)* does not necessarily entail the existence of the peculiar *(al-khāṣṣ)*, as the existence of the peculiar necessitates the existence of the general. Take, for example, living being and man: if man exists, living being exists; but the existence of living being does not necessitate the existence of man." Similarly *ibid.*, p. 122, l. 12sq.

[609] I.e., as the general conceptualization of all the movers of the stars and the outermost sphere (which has the first mover as its object) is related to the particular conceptualizations of the movers of the seven planets (which have the entirety of the revolution of these planets as their objects), so is each mover of the seven planets related to the movers of the particular motions (no matter whether epicycles, spiral motions, or motions by trepidation). Both are *pros-hen* relations, the former with the first mover as the first in nobility and in conceptualization as well as as cause of existence of the movers of the seven planets, the latter with the movers of the seven planets as the first *qua* final cause of the particular motions of the planets and as cause of existence of the movers of these particular motions.

[610] Cf. above, notes 27 and 61.

[611] Cf. above, p. 24 of the translation and note 11.

[612] The same argument in [Pseudo?–]Alexander, *Fī Mabādiʾ al-kull*, p. 84, l. 11 – p. 86, l. 4.

[613] *Al-Qurʾān* 21:22, transl. M. Pickthal.

[614] I.e., if the world is neither essentially nor accidentally one, it must be many. The idea of a plurality or infinity of worlds is reduced ad absurdum in *De caelo* I 8–9 and, with different arguments, in *Metaph.* XII (Λ) 8, 1073 a 31–38.

[615] The city-state as simile of the heavens originates presumably from the pseudo-Aristotelian *De mundo* from where it has been adopted in [Pseudo?–]Alexander's *Fī Mabādiʾ al-kull* (cf. p. 112, l. 8 sqq., p. 116, l. 9 sqq., and Genequand's introduction, p. 17–19). However, while [Pseudo?–]Alexander speaks about *one* authority *(mudabbir)* formed either by the leader *(al-raʾīs)* or by the law *(al-sharīʿa)*, Ibn Rushd applies to it Aristotle's ideal form of government, the aristocracy, which seems to account much better than the monarchy for the fact that the unity of the heavens is constituted and preserved by a multiplicity of movers.

[616] The term 'household cities' *(mudun manziliyya)* refers to democratic cities. In his commentary on Plato's *Republic*, Ibn Rushd describes democracy as a mere assemblage of different households which lack a common conception of the highest good. In this form of government the parts did not exist for the sake of the whole, but rather the other way round; cf. C. E. Butterworth, *Philosophy, Ethics and Virtuos Rule. A Study of Averroes' Commentary on Plato's Republic*, p. 76; P. Crone, *Medieval Islamic Political Thought*, p. 189 sq.

[617] Ibn Rushd turns now to *Metaph.* XII (Λ) 9 and the question what it is that the celestial movers think.

[618] Cf. Ibn Rushd, *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 86–90; *Talkhīṣ Kitāb al-nafs*, p. 69 sq., 126–130 (ed. Ivry).

[619] Cf. above, p. 150–52 of the translation.

[620] For the Neoplatonic roots of this conception of causation as a consequence of the perfection of its principle cf. Plotinus, *Enneas* V.4.2, 27–37: "In each and every thing there is an activity (ἐνέργεια) which belongs to the substance and one which goes out from substance; and that which belongs to substance is the active actuality which is each particular thing, and the other activity derives from the first one, and must in everything be a consequence of it, different from the thing itself: as in fire there is a heat which is the content of its substance, and another which comes into being from that primary heat when fire exercises the activity which is native to its substance in abiding unchanged as fire. So it is also in the higher world; and much more so there, while the Principle abides "in its own proper way of life" [Plato, *Timaeus* 42 E 5–6], the activity generated from the perfection (τῆς

τελειότητος) in it and its coexistent activity acquires substantial existence, since it comes from a great power, the greatest indeed of all, and arrives at being and substance," transl. A. H. Armstrong (Greek quotations added). For Plotinus' twofold theory of ἐνέργεια cf. D. Bradshaw, *Aristotle East and West*, p. 73–96. For its reception and transformation in the Arabic Neoplatonica cf. P. Adamson, *The Arabic Plotinus*, p. 50–54, 63 sq.; Arnzen, *Aristoteles' De Anima*, p. 217, l. 13–15 (apparatus), p. 378–380.

[621] The same train of thought is found in Ibn Rushd's *Tahāfut al-tahāfut*, p. 204 sq.

[622] *Al-Qurʾān* 67:14, transl. M. Pickthal.

[623] The most influential philosopher with respect to Ibn Rushd's own doctrine of the intellect who held this position was Ibn Bājja; cf. his *Tadbīr al-Mutawaḥḥid*, ed. Fakhrī, p. 79 sq.

[624] The same argument is found in Ibn Rushd's *Tahāfut al-tahāfut*, p. 203 sq.

[625] *Al-aqāwīl allatī tuʾkhadhu akhdhan muhmalan* (lit. 'statements taken as being obsolete', or as 'indifferent [with respect to truth]') are what Ibn Rushd calls elsewhere *aqāwīl muhmala* or, in short, *muhmalāt*, a technical term referring to what Aristotle calls 'stating of a universal not universally' (τὸ μὴ καθόλου ἀποπηαίνεσθαι ἐπὶ τῶν καθόλου; *De interpretatione* 7, 17 b 9, cf. 17 b 29–34), i.e. contrary statements of the kind 'a man is white', 'a man is not white', which are about a universal not taken universally and thus capable of being true and false at the same time. Cf. Ibn Rushd, *Talkhīṣ Kitāb al-ʿibāra*, p. 71 sq.

[626] I.e., the irreconcilability of ignorance *qua* deficiency with God *qua* most superior being; cf. above, p. 159 of the translation.

[627] This doctrine is generally ascribed to 'the philosophers' *(al-falāsifa)* in Ibn Rushd's *Tahāfut al-tahāfut*, p. 214–216.

[628] I.e., inasmuch as it belongs to the same species as this substance, but differs—*qua* effect—in terms of superiority and inferiority in nobility from its agent; cf. above, p. 158.

[629] Cf. Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1404, 1424sq., 1558sq.

[630] Aristotle identifies the first mover's activity with life (ζωή) and pleasure (ἡδονή); *Metaph.* XII (Λ) 7, 1072 b 14–30. The hendiadys 'pleasure and delight' *(ladhdha wa-ghibṭa)* as well as its application to the celestial principles in general stem from Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.7, p. 424sq.

[631] A paraphrase of Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* VIII.7, p. 369, l. 6–8: "For pleasure is nothing other than the apprehension of the suitable inasmuch as it is suitable. Thus, sensory pleasure is the sensing of the suitable, and the intellectual [pleasure] is the intellectual apprehension of the suitable. Similarly, the First is, hence, the best apprehender through the best apprehension of the best object of apprehension," transl. M. E. Marmura, p. 297 (slightly modified).

[632] Cf. above, p. 112sqq., 120–22, 155 of the translation.

[633] Namely their own essence as being inferior to that of the higher sphere(s) as well as these higher sphere(s) and the first mover as their principles and objects of intellectual desire; cf. p. 153–55 of the translation.

[634] حتى يكون أكثر العقول كثرة معقولات هذا العقل الذي فينا in the Arabic manuscripts except ms. *H* which reads *al-maʿqūl* instead of *al-ʿuqūl*. Horten and Van den Bergh follow this latter reading (Horten, p. 186, translates: "bis schließlich die größte Vielheit (und Unvollkommenheit) des Gedachten (d.h. der emanierten Geister) die Vielheit der Begriffe (der 'gedachten' Inhalte) dieses Geistes ist, der in uns ist"). The translation provided by I. Mantino, fol. 392ra, seems to be the correct one: "adeo quod huic intellectui, qui est in nobis, insit maior pluralitas intelligibilium quam in omnibus intellectibus" (similarly Quirós, p. 246, "hasta el punto de que la inteligencia con mayor número de inteligibles sea el entendimiento existente en nosotros"). For another, rather improbable, interpretation one might think about reading *ḥattā yukawwina* instead of *ḥattā yakūna* which entails a significant change of meaning. Thus the clause would say 'until [finally] the largest number of [separate] intellects brings about the multiplicity of intelligibles of this human intellect'.

[635] With this section, Ibn Rushd turns to *Metaph.* XII (Λ) 10. The central question of this chapter of Aristotle's *Metaphysics* is whether the Good is a transcendent principle of the universe or a structural element immanent in the order of the parts of the universe (cf. *Metaph.* XII 10, 1075 a 11–13). For the time being Ibn Rushd separates the two limbs of this question and makes the order of the universe as such, independent of its relation to the Good or any final cause, the sole object of inquiry in the first part of the present section. The order *(tartīb)* and connection *(irtibāṭ)* of the parts of the universe rather than the Good are also the main topics of Ibn Rushd's introduction to this chapter in his *Long Commentary on the Metaphysics*, p. 1710–1713. In this introduction Chapter 10 is depicted as a separate 'third part' of *Metaph.* XII (Λ); cf. Arnzen, "Ibn Rušd on the Structure of Aristotle's *Metaphysics*." The question of the immanence or transcendence of the Good, on the other hand, is discussed in the Epitome only in the context of divine providence and theodicy at the end of the present chapter.

[636] In his *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 249, Ibn Rushd depicts the inverse proportionality between the number of stars of a sphere and the number of motions performed by one star as a kind of retributive justice of nature, providing each celestial body with the greatest possible adequate perfection.

[637] For the ancient and medieval disputes on whether Mercury and Venus are to be located above or below the sphere of the sun cf. E. Grant, *Planets, Stars, and Orbs*, p. 311–314, and the literature mentioned there. Most Arabic-writing astronomers held the latter position which is also preferred by Ibn Rushd, cf. M.-P. Lerner, *Le monde des sphères.* Tome I. *Genèse et triomphe d'une représentation cosmique*, p. 95sq., 105; G. Saliba, "The Role of the *Almagest* Commentaries in Medieval Arabic Astronomy: A Preliminary Survey of Ṭūsī's Redaction of Ptolemy's *Almagest*," esp. p. 9sq.

[638] Cf. above, p. 149 of the translation.

[639] For the formalization and relevance of this Neoplatonic principle in the philosophy of Ibn Sīnā cf. H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 74–83. The principle is intensively discussed in medieval Arabic and Latin philosophy. For examples cf. Bahmanyār ibn al-Marzubān, *Kitāb al-Taḥṣīl*, p. 580; al-Ghazālī, *Tahāfut al-falāsifa*, p. 173, 175, 183, etc.; Abū l-Barakāt al-Baghdādī, *Kitāb*

al-Muʿtabar, III, p. 148–151, 156sq.; Shihāb al-Dīn al-Suhrawardī, *Kitāb al-Mashāriʿ wa-l-muṭārahāt*, III, p. 450; Ibn Rushd, *Tahāfut al-tahāfut*, p. 173–182, 230sq., 239, 245sq, 249–251; Albertus Magnus, *De Causis et processu universitatis a prima causa*, p. 40, 59–61; idem, *Metaphysica*, p. 542; idem, *Super Dionysium De caelesti hierarchia*, p. 10; Henry of Ghent, *Quodlibet IX*, q. 2, p. 44; John Duns Scotus, *Lectura I*, dist. 1, p. 1, q. 1, p. 65; idem, *Ordinatio II*, dist. 3, p. 1, q. 7, p. 508; Thomas Aquinas, *Sententia libri Metaphysicae*, XII, lec. 9; idem, *Summa theologiae*, I, q. 45, art. 5, q. 47, art. 1; etc.

[640] This section touches upon the crucial question whether and how multiplicity proceeds from the one, whether it is the absolutely unitary first cause or rather a second subordinate entity which produces multiplicity. Ibn Rushd argues that the Avicennian rule that from the one only one can proceed is true, but the reverse is not true; i.e. it is not the case that any unity proceeds from or is caused by the one, any duality proceeds from a duality, and so on. Hence, what is one may be caused by a multiplicity, and what is three may be caused by a duality. But not only this, even a multiplicity—and this is the critical point Ibn Rushd is aiming at—may be caused by the one. Of course, this raises the question whether this view does not violate the very principle that from the one only one can proceed. What is needed in order to reconcile the two doctrines is a sort of differentiation between the points of view or the directionality of this process of causation or emanation. In other words, if a duality or multiplicity may be caused by the one, while the one can cause only what is one, this multiplicity can be multiplicity only *qua* being caused, that is as 'product' of the process of emanation, but it must be one from the point of view of its cause, that is of the one which initiates the process of emanation. Thus the Avicennian principle is correct from the point of view of the first cause of emanation, but its reverse is incorrect from the point of view of the effect of this emanation. This is exactly the rationale given in the following section.

[641] Cf. Ibn Rushd, *Tahāfut al-tahāfut* where the doctrine is associated with Anaxagoras and Plato (p. 177), and, by means of the doctrine that multiplicity requires matter, with Themistius (p. 271). Cf. also Ibn Sīnā, *al-Najāt*, p. 635, note 6 (ed. Dānish-Pažūh).

[642] As already indicated by H. A. Davidson, "Averroes on the Active Intellect as a Cause of Existence," p. 193sq., note 11, the present para-

graph is a later addition by Ibn Rushd not transmitted in ms. *H*. This is clear both from the Hebrew transmission of the text as well as from the fact that Ibn Rushd refers at the end of the paragraph to a work composed after the original version of the Epitome. There is, however, some confusion in Davidson's remarks on the transmission. First, it is not correct that the second Cairo manuscript (ms. *Q*) also lacks this paragraph (it is found there on fol. 214 v 13–19). Secondly, Amīn does not mention any third Cairo manuscript, as stated by Davidson; and to my knowledge there is none such. More important, Davidson's statements on how this paragraph is related to the preceding section are not quite supported by a careful reading of the text itself. Davidson claims to find a significant "change of mind," and explains that in the present paragraph Ibn Rushd "repudiates much of what has preceded" and "characterizes the [preceding] argument ... in the original text not as his own" (*ibid.*, p. 198). According to Davidson's interpretation Ibn Rushd defends in the original version "a system wherein the wholly unitary first cause is not associated with a celestial sphere", "continually engenders a single incorporeal entity," and "transcends the incorporeal movers of the spheres," whereas in his "new approach ... the ultimate, absolutely unitary being is not an efficient cause, does not act through a process of emanation, and does have multiple effects" (*ibid.*, p. 197–199). This interpretation imposes the approach provided in Ibn Rushd's late *Long Commentary on the Metaphysics* upon the present section.

Contrary to Davidson's description, Ibn Rushd sticks in both the preceding section as well as the present addition to the principle that from the one only one can proceed, which in *both* sections is qualified as being a correct *(ṣaḥḥa)* or true proposition *(qaḍīya ṣādiqa)*. Furthermore, Ibn Rushd does not exclude, as intimated by Davidson, efficient causality from the first principle (as he indeed does in the *Long Commentary on the Metaphysics*, p. 1652). What he says is that this principle of emanation is true *only* for efficient causality, but that this does not exclude the emergence of multiplicity from the first principle in terms of formal or final causality. Nor is it true that Ibn Rushd in the original version rejects the possibility of a multiplicity of effects of a unitary cause, while this is accepted in the later addition. On the contrary, this possibility is exactly what is envisaged through the rejection of the invertibility of this emanative principle at the end of the preceding section (as explained in note 640) which pertains to the orig-

inal version of this work. On the other hand, Davidson is right inasmuch as this indeed implies a significant change with respect to what has been stated only five pages before, where the emergence of the first multiplicity is excluded from the transcendent deity and located in the mover of the outermost sphere (cf. p. 163 sq. of the translation). But this incoherence is already part of the original version, in other words, the idea of one-track emanation was at stake already at this stage of Ibn Rushd's thinking.

This brings us to Davidson's depiction of the present paragraph as repudiating what has been stated in the preceding section. This is based on a misinterpretation of Ibn Rushd's references to this section. Obviously, Davidson interprets these references ("the above," *hādhā*, "the [argument] I mentioned," *hādhā lladhī dhakartuhū*) as referring to the preceding section in its entirety, thus conceiving this section as presenting one coherent doctrine, namely Ibn Rushd's original view borrowed from al-Fārābī and Ibn Sīnā. But this simply does not apply to what we read there. As a matter of fact, the preceding section does not consist in presenting anybody's doctrine coherently, but rather in dealing in a controversial manner with three doctrinal elements, (i) the emanation principle said, (ii) its inversion, and (iii) the question whether the truth of this principle entails the truth of its inversion, and this because proposition (ii) contradicts the preceding theory of the order of celestial principles. The references in the present addition (as well as the ascription to 'al-Fārābī and others', i.e. Ibn Sīnā) are to the doctrine which applies (i) and (ii) to the process of causation or emanation from the first principle, which is rejected in (iii). Thus, the present addition is not at all a repudiation of the contents of the preceding section, but rather a continuation and explication of an idea already touched upon in the early version of the Epitome by indicating that this rule of emanation should not be taken in an absolute and invertible sense, and that there after all might be some kind of multiplicity in the activity emerging from the first principle. In the present addition, Ibn Rushd draws on this rudimentary idea of the original version and indicates briefly that this multiplicity might consist in the formal and final causality of the unitary principle in so far as this principle is intelligible through a multiplicity of concepts and thereby causes the perfection of the entities which, being identical with their intelligible objects, think these concepts. In all probability, the reference to another work at the end of this explicative addition is to the

Tahāfut al-tahāfut where this doctrine is set out in a more detailed manner. In this work, we find again the restriction of the principle of emanation to efficient causality (p. 178–180, 230), the rejection of the invertibility of this principle (p. 245, 249 sq.), as well as a full exposition of the idea that this does not exclude the emergence of a multiplicity of effects *qua* forms or concepts of celestial intellects (p. 231–234). But it is only in this later work that Ibn Rushd explicitly draws the conclusion that the first unitary cause cannot be different from the mover of the outermost sphere (p. 179, 181 sq.), thus definitely abandoning the competing view still prevailing in the present Epitome.

[643] Cf. above, p. 156 of the translation.

[644] Ibn Rushd draws here on Ptolemy's attempt to explain the rather complicated motions of the moon as observed from the earth. According to Ptolemy's theory the moon moves clockwise round an epicycle. The centre of this epicycle (say *E*) moves on a circle, the so-called deferent. The centre of this deferent-circle is not the earth (*T*) but a point (say *D*) which itself revolves with a certain velocity in a close distance round *T*. Much farther away from the earth than the deferent of the moon there is another deferent-circle on which the sun (*S*) moves. There are, thus, three points (*E, D,* and *S*) moving on circles with different centres and radii more or less round the earth (*T*). If we draw lines from *T* to any of these points, the three lines *TE*, *TD*, and *TS* will point into different directions in almost all positions of the sun and the moon, depending on their positions relative to the earth. But there are exactly two positions of the moon where *TD* and *TS* fall on one straight line, namely the positions of half moon (or quartile aspect, *tarbīʿ*), and two positions where all three lines form together one straight line, namely when the moon is in conjunction (new moon) and when it is in opposition (full moon). These four positions of the lunar orbit in which the earth, the sun and the centre of the deferent of the moon stand in a rectilinear position to each other indicate for Ibn Rushd a close interdependence of the motions of the moon and the sun. For an illustrative diagram and more detailed explanations cf. H. Thurston, *Early Astronomy*, p. 144–146.

[645] Cf. Ibn Rushd, *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 211–215, 271, 294–305.

[646] Because contrariety pertains to the realm of coming-to-be and corruption and transient things come to be from and fade away into their contraries; cf. Aristotle, *De caelo* I 4, Ibn Rushd, *Risālat al-samāʾ wa-l-ʿālam*, p. 31, *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 83sq.

[647] Cf. Ibn Rushd, *Talkhīṣ al-samāʾ wa-l-ʿālam*, p. 306–308; *Talkhīṣ al-kawn wa-l-fasād*, p. 86–89; *Talkhīṣ al-āthār al-ʿulwiyya*, p. 206; *Talkhīṣ uṣṭuqussāt Jālīnūs*, in *Commentaria Averrois in Galenum*, p. 24. Cf. also H. A. Davidson, "Averroes on the Actice Intellect as a Cause of Existence," p. 207–209.

[648] Namely the ability of the material intellect to think all separate forms, that is to be identical with all universal intelligibles, which is actualized by the agent intellect. That this potency is an immaterial potency not to be confused with the material potency of composed things is explained at length in comment 5 of Ibn Rushd's *Long Commentary on De anima* III; cf. also R. C. Taylor, "Separate Material Intellect in Averroes' Mature Philosophy."

[649] Cf. Aristotle, *Physics* II 2, 194 b 13sq.; Ibn Rushd, *Long Commentary on the Metaphysics*, p. 1465, l. 1sq., p. 1501, l. 18 – p. 1502, l. 4, p. 1540, l. 9–12, p. 1625, l. 6–9.

[650] Cf. Aristotle, *Metaphysics* VII (Z) 9, 1034 a 21–25; 15, 1039 b 20–26; Ibn Rushd, *Long Commentary on the Metaphysics*, p. 866–870, and above, p. 71sq. of the translation.

[651] Ibn Rushd explains in his *Long Commentary on the Metaphysics*, p. 1628–1631, that what he calls 'potency in space' or potency of locomotion is infinite in the celestial bodies which are continuously and eternally in motion. On the other hand, as this motion occurs in time and is performed in an ordered manner, involving acceleration and deceleration, as well as a certain coordination between the moving bodies, it requires another, finite power which, in a way, controls this infinite potency. This finite power is exerted by the celestial souls or intelligences.

[652] From what follows it becomes clear that Ibn Rushd does not intend to say that humanity as such is accidental to the matter of which the man is made, but rather that *the generation* of humanity *qua* separate form in the man is accidental with regard to man's essential generation through the concrete man and the sun.

[653] Cf. above, p. 72sq. of the translation.

[654] The version printed in the left column, in all likelihood the earlier version, restricts the efficacy of the celestial bodies and their motions with respect to the sublunar world to the essential generation of the forms of the elements and the homeomeric bodies. But there are other things in the sublunar world that cannot be accounted for by such physical factors, e.g. souls with potencies aiming at immaterial ends as well as immaterial universal forms. These cannot be generated by the individual forms of the celestial bodies because individual forms generate essentially nothing but individual entities. Hence, from a metaphysical point of view, the active intellect must be assumed as the giver of the immaterial forms of animated beings as well as the accidental giver of universal forms. Plato and Aristotle disagree in the case of the latter inasmuch as Plato maintains an essential emanation of such forms, whereas this is an accidental process in Aristotle's view. The second, much shorter, version displays another position with regard to the generation of sublunar life or the immaterial form of the soul. This generation is no longer attributed to the agent intellect, but rather depicted as an effect of the celestial bodies as that which supplies the form of sublunar life, no less than that of the elements and homeomeric bodies. The question of the emergence of universal intelligible forms is not touched upon in this version.

As shown at length by H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 220–254, the position unfolded in this version corresponds more or less with Ibn Rushd's late *Long Commentary on the Metaphysics*. A major reason, though not the only one, for this change of positions lies in Ibn Rushd changing approach to the material human intellect and the possibility of its conjunction with the celestial agent intellect, cf. R. C. Taylor, "Separate Material Intellect in Averroes' Mature Philosophy." The link that provided Ibn Rushd with the means to develop his new position was the concept of soul-heat *(ḥarāra nafsiyya)*, an entity that shares both the nature of celestial forms as well as of psychic sublunar forms and, thus, paves the way for conceiving the generation of sublunar souls as effect of the celestial bodies and their heat-producing motions, cf. H. A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect*, p. 242–245, 351–356.

[655] I.e., matter is ungenerated inasmuch as it cannot come to be from another matter as a primary substratum, cf. Aristotle, *Physics* I 9, 192 a

25–34. As is well-known, this doctrine has far-reaching implications with respect to ancient and medieval discussions of the eternity of the world (for Greek philosophy of late antiquity cf. F. De Haas, *John Philoponus' New Definition of Prime Matter*; for Arabic philosophy cf. H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God*, p. 9–48).

[656] Aristotle points to decreasing grades of necessity in the order of the world from the divine principles down to the sublunar beings in *Metaph.* XII (Λ) 10, 1075 a 18–24; cf. also Ibn Rushd's *Long Commentary on the Metaphysics*, p. 1712sq. [Pseudo-?]Alexander, *Fī Mabādiʾ al-kull*, emphasizes the goodness and incorruptibility of this order (p. 114–118) and denies its arbitrariness (p. 120), but nowhere touches upon its necessity. The consideration of necessity here and in what follows is mainly stimulated by Ibn Sīnā's conception of necessity and al-Ghazālī's reaction, on which cf. A. Bäck, "Avicenna and Averroes: Modality and Theology."

[657] The concept of 'second existence' *(wujūd thānin)* originates from Ibn Sīnā's doctrine of necessity and its relation to existence and quiddity. For Ibn Rushd there is necessity on the level of the existence of the souls or separate forms of the celestial bodies as well as on the level of 'second existence', the concrete realization of these forms in the sublunar world. To both levels applies the general rule that existence is better than non-existence. In addition, the existence of the celestial forms implies necessity inasmuch as its perfection necessitates their generation of the forms of the elements. For Ibn Sīnā, the quiddity of necessity is distinct from existence, except for the Necessary Being. Necessity joins existence only on the level of 'second existence' through the realization of specific properties or differentiae. In *al-Shifāʾ: al-Ilāhiyyāt* VIII.5, p. 353, Ibn Sīnā explains: "[N]ecessary existence is established existence; indeed, it is the establishment of existence [...]. In the case of color, however, existence is an adherent that attaches to a quiddity which is color, whereby the quiddity which is in itself color comes to be through existence as an existent in the concrete. [Now,] if the special property were not a cause in establishing the quiddity of necessary existence but [were] for the realization of existence for it, and if existence were something external to that quiddity in the way it is external to the quiddity of color, then the state of affairs would proceed analogously to the rest of the general things that

are separated by differentiae [...]. But [in the case of necessary existence,] existence must be realized for its necessity to obtain. [...] necessity does not have existence as a second thing that it needs [in the way] that being color has a second existence *[wujūd thānin]*. In short, how can something extraneous to necessary existence be a condition for necessary existence?", transl. M. E. Marmura, p. 281 sq. Similarly, we read in Ibn Sīnā's *al-Najāt*, p. 234 (al-Kurdī)/p. 565 (Dānish-Pažūh): "You have to know that the reality of the necessary existence is not like the nature of colour and living being, being genera in need of specific differentiae in order that their existence becomes established because these natures are caused. They are not in need of differentiae [*ilā l-fuṣūl*, ed. al-Kurdī, omitted by Dānish-Pažūh] with respect to [the fact that] being colour and being living being inheres in them, but rather with respect to existence. [...] As these two are not in need of differentiae, in order to be colour or living being, so is [the necessity of existence] not in need of differentiae in order to be something necessary of existence. Moreover, necessity of existence has no second existence *[wujūd thānin]*, for which it would require these [differentiae] [*yaḥtāju fīhi ilayhā*, ed. al-Kurdī, *yaḥtāju ilayhi* ed. Dānish-Pažūh], but [concrete] colour in the present world *(hunāka)* is in need, subsequently to being colour, of the [second] existence and its causes, so that it is established as a concomitant of being colour."

[658] فنسبة النفس الناطقة هنا إلى ما دونها من الصور هي نسبة الناطقة إلى العقل المستفاد. The Arabic text is not quite clear. Horten (p. 200), Van den Bergh (p. 141), and Quirós (p. 263) take the second *al-nāṭiqa* as referring to the rational soul, thus establishing the following proportion: the rational soul is related to the inferior forms as it is related to the acquired intellect. It is hard to believe that this is what Ibn Rushd intends to say, as the acquired intellect in his doctrine is the state of the human intellect's conjoining with the separate intellect and the attainment of its ultimate form; cf. *Talkhīṣ [Epitome] Kitāb al-nafs*, p. 89; *Long Commentary on De anima* III, comment 36. Rather *al-nāṭiqa* seems to refer here to the theoretical intelligibles or rational forms which are always in actuality in the separate intellect. Conjoining with these intelligibles in the state of acquired intellect brings about the final form of human intellection just as the actual activity of the theoretical intellect brings about the actuality and perfection of the material forms acquired by abstraction. Consequently, I render *al-nāṭiqa* as rational [forms], i.e.

forms in the separate intellect *qua* actuality and perfection of human intellect (a similar interpretation has been offered by M. Miṣbāḥī, "Mushkil al-ittiṣāl: al-insān bayna l-biyūlūjiyā wa-l-mītāfīzīqā ʿinda bn Rushd," esp. p. 95 sq.). Alternatively, one might indeed think about taking *al-nāṭiqa* as referring to the rational human soul, but this in connection with an inverted interpretation of the second limb of the proportion established (i.e. the rational soul is related to the inferior forms as the acquired intellect is related to the rational soul). However, this interpretation not only violates the actual wording of the manuscripts but also is lame inasmuch as the acquired intellect, strictly speaking, does not actualize the intelligibles of the theoretical intellect, but rather is the state of the human intellect attained when these intelligibles are actualized through the separate intellect.

[659] In the following discourse on divine providence, Ibn Rushd draws heavily on Alexander of Aphrodisias' treatise 'On Providence' (Περὶ προνοίας) which is extant in two Arabic versions. A critical edition and German translation of both versions is found in H.-J. Ruland, *Die arabischen Fassungen von zwei Schriften des Alexander von Aphrodisias*: Über die Vorsehung *und* Über das liberum arbitrium. An annotated Italian translation by M. Zonta is accessible in S. Fazzo (ed.), Alessandro di Afrodisia, *La Provvidenza. Questioni sulla provvidenza*. A new critical edition and French translation of the version prepared by Abū Bishr Mattā ibn Yūnus was published by P. Thillet, *Alexandre d'Aphrodise. Traité De la providence*.

[660] It is not clear to whom Ibn Rushd refers here. The same anonymous ascription of this doctrine is found in his *Jawāmiʿ Kitāb al-samāʿ al-ṭabīʿī*, p. 26. Probably, he has in mind the atomists in general and Democritus in particular who were associated with this doctrine in late antiquity; cf. C. C. W. Taylor, *The Atomists: Leucippus and Democritus. Fragments. A text and translation with commentary*, p. 91 sq.

[661] The heating effect of reflected sunrays proves for Ibn Rushd that the warming of the earth through the sun is not due to the essence of the sun as such, but is rather constituted essentially by the sunrays emitted to the earth. If this heat were an essential constituent, not of the sunrays, but of the substance of the sun independently from its relation to the earth, the heat would no longer belong to reflected sunrays. Hence this nature of the sunrays must be a deliberately intended effect

of divine providence for the sake of the earth. A similar theory of the heat of the sun and the nature of the sunrays is found in Ibn Sīnā, there detached from the doctrine of divine providence: "The things subject to coming-to-be and corruption are generated through the effect of these [celestial bodies] which they obey. Although the sphere is itself neither hot nor cold, heat and cold is emitted from it to the sub[-lunar] bodies through powers emanating from it onto them. This can be observed from the heating effect of its rays reflected by mirrors. For if the cause of this heating were the heat of the sun to the exclusion of its rays, then the higher something is the hotter it should be. However, often a thing on which the [sun-]rays fall is warmed up, while that which is above this [thing] is not warmed up, but rather very cold. Hence, the cause of the warming effect is the gathering of the sunrays warming up (reading *al-musakhkhin* with the majority of the manuscripts and al-Kurdī, instead of *li-l-musakhkhin*, ed. Dānish-Pažūh) that in which they come together," Ibn Sīnā, *al-Najāt*, p. 153 (al-Kurdī) / p. 307 sq. (Dānish-Pažūh).

[662] A paraphrase of Alexander of Aphrodisias, *On Providence*, p. 37 (Ruland), p. 11, l. 11–18 (Thillet).

[663] A paraphrase of Alexander of Aphrodisias, *On Providence*, p. 43 (Ruland), p. 12, l. 10–20 (Thillet).

[664] A paraphrase of Alexander of Aphrodisias, *On Providence*, p. 45, l. 1–7 (Ruland), p. 12, l. 20–25 (Thillet). The same argument is found in al-Kindī's "The Determination of the Proximate Agent Cause of Coming-to-be and Corruption" *(Al-Ibāna ʿan al-ʿilla al-fāʿila al-qarība li-l-kawn wa-l-fasād)*, p. 229 sq., ed. M. Abū Rīda (I am grateful to Peter Adamson for having brought this to my attention).

[665] Cf. Alexander of Aphrodisias, *On Providence*, p. 47, l. 1–10, p. 49, l. 6 sq. (Ruland), p. 13, l. 4–11, 18 sq. (Thillet). This doctrine is not quite coherent with Aristotle's *Meteorology* (and Ibn Rushd's commentaries), according to which there are two major causes or signals of of rain which have to come together, namely winds and the cooling of a great amount of vapour; cf. Aristotle, *Meteorologica* I 11, III 3. For Theophrastus, a pupil of Aristotle, the full moon signals rain when it is rising from or setting into clouds, or when it is darkish or cloudy (ζοφώδης); cf. Theophrastus of Ephesus, *On Weather Signs*, p. 66, 74. Ibn Sīnā, on the other hand, saw a close connection between rain and

the lunar halo; cf. *K. al-Shifāʾ: al-Ṭabīʿiyyāt V. Al-Maʿādin wa-l-āthār al-ʿulwiyya*, p. 48 sq.

Necessity and chance in the relation between rain and the ripening of fruits are addressed by Aristotle in *Physics* II 8, 198 b 10 sqq. For the moon's influence on the latter cf. also Aristotle, *De generatione animalium* IV 10, 777 b 25 sqq. and, in general, Paul Lettinck, *Aristotle's Meteorology and Its Reception in the Arab World.*

[666] A paraphrase of Alexander of Aphrodisias, *On Providence*, p. 47, l. 11 – p. 49, l. 5 (Ruland), p. 13, l. 12–18 (Thillet).

[667] I.e. at the highest point in the moon's daily circle round the pole and at its greatest northerly declination. Observed from the latitude of Alexandria this position is close to the vertical.

[668] During the summer of the northern hemisphere the orbit of the moon has only a small inclination against the ecliptic plane. The full moon has a southern declination and lies low in the south.

[669] Ibn Rushd uses here and in the following section forms of the root *Ẓ-H-R* ('to be visible', 'visibility') and, depending on which group of manuscripts we follow, either of the eighth stem of *S-T-R* or of the tenth stem of *S-R-R* (both meaning 'to be concealed', 'invisibility') in order to denote full moon and new moon. The translations provided by Horten and Van den Bergh are partly lacunose, partly wrong.

[670] I.e., around noon. Here and in the following, Ibn Rushd deals with the situation during summer.

[671] I.e., around midnight.

[672] The rationale seems to be as follows: Since the full moon in summer nights occurs at the smallest declination of the orbit low in the south, the moon's rays approach the earth with a narrow angle and hit primarily its southern parts, which brings about the moon's cooling effect on the northern hemisphere. The action of rays is taken into consideration in the same context by al-Kindī; cf. Peter Adamson, *Al-Kindī*, p. 181–91.

[673] *Al-masīrāt al-muʿtadila*. The mean course of the moon (or any other planet) is the rotation of the centre of the revolving epicycle on the deferent circle irrespective of any epicyclical anomaly.

[674] Cf. *Metaph.* XII (Λ) 8, 1073 b 22–27, where Aristotle reports (and obviously accepts) Eudoxus' view that all planets share both the diurnal as well as the ecliptical motions of the sun and the moon. The same argument in the context of divine providence is adduced by Alexander of Aphrodisias, *On Providence*, p. 33, l. 3–6 (Ruland), p. 10, l. 25 – p. 11, l. 1 (Thillet).

[675] Cf. above, p. 156 of the translation.

[676] Cf. p. 149sq. of the translation and notes 591 and 601.

[677] Cf. p. 156–61 of the translation.

[678] *Wa-kullu mā huwa mawjūdun hāhunā mimmā huwa khayrun maḥḍ* is the subject of this clause with *kullu mā huwa mawjūdun hāhunā* standing in a partitive relation to *mā huwa khayrun maḥḍ*. This does not admit the identification of *mā huwa khayrun maḥḍ* with the first principle of the *Liber de causis* proposed by P. Thillet, *Alexandre d'Aphrodise. Traité de la Providence*, p. 72.

[679] This is the beginning of a rather long protasis. The apodosis begins with 'Consequently', below. The structure has not been recognized as such in the three previous modern translations.

[680] A similar distinction is found in Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.6, p. 417sq. (transl. M. E. Marmura, p. 341sq.), likewise the following example of fire.

[681] A paraphrase of Alexander of Aphrodisias, *On Providence*, p. 95, l. 16–19 (Ruland), p. 22, l. 12sq. (Thillet).

[682] Cf. Alexander of Aphrodisias, *On Providence*, p. 13, l. 14–16, and p. 17, l. 2–12, 15–19 (Ruland): "Furthermore, those who say that God (exalted and mighty) pays attention to all particulars and individuals and that these are constantly and without exception under his monitoring and providence are faced with absurd consequences. [...] Divine providence cannot apply to each single individual. For if [God's] providence worked this way, this would necessarily entail that his attention for them and [his] examination of all of them were incomplete and [that] his thinking of them in their entirety had to change according to the fact that they are infinite and that there is an infinite [number] of differences between them, which is impossible. For to know a plurality of things simultaneously is not impossible. [...] But to

take care of a plurality of things in a primary way simultaneously and to think them such that each of them is examined in thought and made an individual object of care, this is impossible. [...] If somebody says that the providence for the things in the present world might not occur simultaneously, but rather successively, [we reply that] this does not comply with the hypothetical assumption. For it had been posited that no thing at all, no matter whether it is said to exist are to come to be at a certain time, is devoid of [divine] providence." For the reference to the Stoics cf. *ibid.*, p. 9, l. 2, p. 234sq.; Genequand, *Alexander of Aphrodisias on the Cosmos*, p. 18sq.; and Thillet, *Traité De la providence*, p. 15, 30–42. For parallels in other works by Ibn Rushd cf. *ibid.*, p. 68–76.

[683] I do not see any reason for conceiving the last two sentences as an interpolated gloss, as proposed by Van den Bergh (p. 271, note 145[3]). A similar distinction between *[a]* necessary evil required by the nature of the possible thing in which it occurs and *[b]* potential evil necessitated by something extrinsic to the nature of the evil in which it occurs is found in Ibn Sīnā, *al-Shifāʾ: al-Ilāhiyyāt* IX.6, p. 417. *[a]* is possible only inasmuch as the thing the nature of which requires the evil is possible, but not in such a way that there is an extrinsic cause necessitating the evil as such.

[684] Cf. Alexander of Aphrodisias, *On Providence*, p. 13, l. 18 – p. 15, l. 14 (Ruland): "As there are things whose existence is necessary, such that it is impossible that they do not exist at any point of time, so there are [reading *minhā* instead of *fīhā*] things which necessarily do not exist and the existence of which is impossible at any point of time. [...] For the diagonal cannot be [commensurable with] the side of the square, eight cannot be smaller than one, three cannot equal four, colours cannot become audible nor sounds visible, and gods cannot be non-existent nor transient [...]. Indeed, those who posit that God's providence works this way negate his [existence] generally. For they judge things to be possible which are by their nature impossible, although the doctrine that the gods bring about only those things which are possible is much more cogent than the doctrine that the impossible is possible to the gods. For according to the first doctrine each possible [thing] is something in the will of God, and that which is in God's will is solely and without exception that which can exist or come into being, since God knows best the nature of that which is impossible and of that

which is possible in each single case." Cf. also Alexander of Aphrodisias, *De fato. [CAG, Suppl. Arist. II.2]*, p. 200, l. 19–22, English translation by R. W. Sharples, *Alexander of Aphrodisias On Fate*, p. 80.

[685] It is not clear whether Ibn Rushd is still summarizing Alexander of Aphrodisias or resumes his own considerations on *Metaph.* XII (Λ) 10. In support of the former one might refer to Alexander's *De fato [CAG, Suppl. Arist. II.2]*, p. 204, l. 15–17, where Alexander possibly touches upon the idea that the gods' nature admits neither good nor bad (however, both the transmission of the text as well as its interpretation are problematic; cf. R. W. Sharples, *Alexander of Aphrodisias On Fate*, p. 84 [translation], p. 168 [commentary], p. 264 [variant readings]). The latter is suggested by the subsequent reference to Protagoras which, in all likelihood, takes into account Aristotle's reference to Protagoras' relativism in *Metaph.* IV (Γ) 4, 1007 b 20–23 (cf. the following note). On the whole, the entire section is in accord with Alexander's rejection of any choice between good and evil in the Gods' acting unfolded in *De Fato*. The Gods cannot not be good, which is why 'praise' in this respect is inappropriate. And they are essentially and by their nature good (cf. *'ṭabīʿat al-mawjūd alladhī fī ghāyat al-khayr'* in the following sentence), which is why, not their acts, but the effects of their acting are good. For the relevant sections of *De Fato* and Alexander's sources cf. J. Mansfeld, "An Echo of Middle Platonist Theology in Alexander's 'De Fato' ch. 34."

[686] Ibn Rushd seems to distinguish here between good and evil as such or natural good and evil *(khayr/sharr bi-l-dhāt)* and good or bad by (social/moral) convention, which he calls 'posited good' *(khayr bi-l-waḍʿ)*. The same distinction is found in his Epitome of Plato's *Respublica*; cf. Ralph Lerner, *Averroes on Plato's "Republic"*, p. 81 (Arabic translation from the Hebrew by Aḥmad Shaḥlān, Bayrūt 1998, p. 144).

[687] The first that comes to the mind in view of this reference is the famous beginning of Protagoras' treatise *On the Gods*: "Concerning the gods, I have no means of knowing whether they exist or not or of what sort they may be. For many are the things that prevent knowledge: the obscurity of the subject and the brevity of human life." (Diels-Kranz, *Die Fragmente der Vorsokratiker*, 80B4); cf. also Plato, *Protagoras*,

341 D-E, *Nomoi*, 716 C-D (for the Greek transmission of this dictum and Protagoras' agnosticism cf. E. Schiappa, *Protagoras and Logos. A Study in Greek Philosophy and Rhetoric*, p. 141–154). However, it seems to be rather Protagoras' *homo mensura* doctrine and especially his relativism or sensationalism what Ibn Rushd is referring to at the present place. Both doctrines were known to him through Aristotle's *Metaphysics* (cf. IV [Γ] 4, 1007 b 20–23, and X [I] 1, 1053 a 35 – b 1), and especially the latter is discussed extensively in his *Long Commentary on the Metaphysics*, p. 382–385. This explains why Ibn Rushd promises in the next sentence to deal with Protagoras' views in the following chapter. The context of this discussion is not the present, theological question of divine providence and theodicy, but rather the law of contradiction which, together with other topics of *Metaph.* IV (Γ) 4–8, forms the main subject of the unpreserved fifth chapter of the Epitome (cf. note 23).

[688] At the present place, the text breaks off in all chains of transmission, Arabic, Hebrew and Latin. All Arabic manuscripts close, as usual, with the *ḥamdalah*. The announcement of a fifth chapter in the introduction of the work (cf. p. 26 of the translation) as well as the repeated references to this chapter at various places in the work suggest that the absence of this chapter is due either to its omission or physical separation (as result of a codicological mishap) in an early stage of the transmission or to Ibn Rushd's (unrealized) plan for a revision of this part of his work. While most Arabic manuscripts end after the *ḥamdalah* (or the following colophon), three manuscripts transmit an additional statement on the absence of the fifth chapter. In ms. *Q* we read: "Somebody who personally talked to the author reported that he [i.e. the author] did not attend to completing the book by [adding] the promised fifth chapter—because it would contain predominantly irrelevant things such as the verification of the principles of the sciences and the indisputable premises—but considered what he had pointed out [in the previous chapters] to be sufficient." In mss. *A* and *R* we read: "In the manuscript from which this manuscript was copied [the following] was [written:] This fourth chapter is the last one of this book. [The author] decided not to add what he had promised to discuss in the fifth [chapter], because he considered that [part] of this science which remains to be treated to be irrelevant, for most of it consists only in providing the principles of the sciences and verifying the indisputable premises

through generally accepted—i.e. dialectical—arguments. Since this is not necessary, he broke off his teaching at the end of Chapter IV. This was reported by somebody who personally talked to the author (may God be pleased with him)." However, both the rather limited circulation as well as the late date at which such statements entered the manuscript transmission and their absence from the early Arabic manuscripts as well as from the Hebrew transmission indicate that we have here a forgery of a copyist who tried to hide the fragmentary character of his *Vorlage*. Besides, the remark, found in both versions of the statement, to the effect that Ibn Rushd judged the finding and verification of the first principles of the sciences as being 'irrelevant' is certainly disproved by the immense comprehensiveness of his Long Commentaries on the relevant sections of Aristotle's *Analytica posteriora* and *Metaphysics*. As for the possible reasons for the absence of Chapter V from the manuscript transmission as well as the question which sections of the *Metaphysics* Ibn Rushd might have treated therein, cf. above, "Translator's Introduction," and more detailed Arnzen, "On the Nature and Fate of Chapter V of Ibn Rushd's *Epitome* of Aristotle's *Metaphysics*."

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